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UNITED STATES AIR FORCE

OCCUPATIONAL SURVEY REPORT

WEATHER

AFSCs 1W0X1/A AND 15WX/A

AFPT 90-1W0-098

APRIL 1998

OCCUPATIONAL ANALYSIS PROGRAM
AIR FORCE OCCUPATIONAL MEASUREMENT SQUADRON
AIR EDUCATION AND TRAINING COMMAND
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PREFACE

This report presents the results of a detailed Air Force Occupational Survey of the Weather career field, Air Force Specialty Codes (AFSCs) 1W0X1/A (enlisted) and 15WX/A (officer). Authority for conducting occupational surveys is contained in AFI 36-2623. Copies of this report and pertinent computer printouts are distributed to the Air Force Functional Manager, the operations training location, all major using commands, and other interested operations and training officials.

The survey instrument was developed by First Lieutenant Nicole H. Raney, Inventory Development Specialist, with computer programming support furnished by Mrs. Jeanie C. Guesman. Mr. Richard G. Ramos provided administrative support. Mr. James B. Keeth, Occupational Analyst, analyzed the data and wrote the final report. This report has been reviewed and approved by Lieutenant Colonel Roger W. Barnes, Chief, Airman Analysis Section, Air Force Occupational Measurement Squadron (AFOMS).

Additional copies of this report can be obtained by writing to AFOMS/OMYXI, 1550 5th Street East, Randolph AFB Texas 78150-4449, or by calling DSN 487-5543. For information on the Air Force occupational survey process or other on-going projects, visit our web site at http://www.omsq.af.mil.

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SUMMARY OF RESULTS

1. **Survey Coverage**: The Weather career field was surveyed to provide current job and task data for use in identifying current utilization patterns and in updating career field documents and training programs. Survey results are based on responses from 2,378 active duty, Air National Guard, and Air Force Reserve respondents. All major using commands were well represented in the survey sample.

2. **Specialty Jobs**: Twelve jobs were identified in the career field structure analysis. Ten of the jobs were directly involved in performing the technical duties and tasks pertaining to various weather activities, while the remaining two jobs were characterized by management, supervisory, or training activities. Two jobs, Weather Forecaster and Weather Observer, are the core jobs of the career field, making up 66 percent of the survey sample.

3. **Career Ladder Progression**: Distinctions between skill-level groups are evident, with personnel at the 3- and 5-skill levels spending more of their relative time on weather observing activities. At the 5-skill level, personnel take one of two paths. A small number continue to perform weather observing tasks, while the largest percent obtain an A shred and begin transitioning to weather forecasting activities. At the 7-skill level, personnel take on the role of supervisors, while still performing many forecasting tasks. At the 9-skill and CEM levels, supervisory and managerial duties become more evident. Entry-level officers spend much of their job time performing technical tasks, while fully-qualified and staff-level officers perform a more managerial role. Air National Guard personnel perform more contingency, mobility, and Army support activities than their active duty counterparts. Air Force Reserve officers perform weather reconnaissance aircraft activities.

4. **Job Satisfaction Analysis**: Overall job satisfaction for Weather personnel was fairly high across the entire career field, especially when compared with similar direct support career ladders. Guardsmen and reservists, however, provided higher job satisfaction ratings than their active-duty counterparts.

5. **MAJCOM Differences**: Tasks and background data of the MAJCOMs and field operating agencies with the largest Weather populations were compared to determine whether job content varied as a function of command assignment. In general, there were no major differences between MAJCOM groups. However, some minor differences were noted for Weather personnel assigned to Air Weather Service, Air Force Space Command, AFSOC, and AETC.

6. **Implications**: Survey results indicate the Weather career field structure is a fairly bipolar one, with the Weather Forecaster and Weather Observer jobs comprising two-thirds of the survey sample. Job progression for both AFSC 1W0X1/A and 15WX/A personnel showed a distinct pattern as one progressed through the ranks. No major differences among MAJCOM groups were found. And, job satisfaction ratings for Weather personnel were high across the career field. However, reenlistment intentions of first- and second-enlistment active duty enlisted personnel were somewhat low, indicating a potential retention problem in coming years.

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OCCUPATIONAL SURVEY REPORT (OSR)
WEATHER CAREER FIELD
(AFSC 1W0X1/A AND 15WX/A)

INTRODUCTION

This is a report of an occupational survey of the Weather career field completed by the Air Force Occupational Measurement Squadron (AFOMS). Data were collected for use in identifying current utilization patterns and in validating career field documents and training programs. The last Weather OSR was published in June 1992.

Background

As described in the AFMAN 36-2108 *Specialty Description*, dated 31 October 1996, AFSC 1W0X1/A personnel perform and manage the collection, analysis, and forecast of atmospheric and space weather conditions, and the tailoring and communication of weather information. They collect and disseminate weather data and information; use fixed and deployable meteorological sensors to observe atmospheric and space weather conditions; use satellite and radar imagery, computer generated graphics, and weather communication equipment and instruments to analyze atmospheric and space data and information; forecast atmospheric and space weather conditions; issue warnings and advisories to alert users to mission critical weather; exploit weather analysis and data to enhance combat operations and training; tailor and communicate weather information to meet operational requirements; manage weather operations; and ensure standardization and quality weather products, operations, and activities.

According to AFMAN 36-2105 *Specialty Description*, dated 31 October 1995, AFSC 15WX/A personnel manage and direct weather resources, including forecasting, observing, and administrative functions for Air Force and Army activities. They integrate current and forecast weather and space environmental conditions into operational planning. They develop, direct, and coordinate meteorological and space environmental studies and research, and they provide staff supervision and technical advice on environmental matters. They support the Air Force core weather function to provide meteorological and space environmental information for DoD air, ground, and space operations.

Enlisted personnel entering the Weather career field attend three Interservice courses for the award of AFSC 1W031. These courses are Basic Weather, E3AQR1W031; Field Skills, E3AQP1W031; and Weather Apprentice, E3ABR1W031. The Basic Weather and Weather Apprentice courses are both taught at Keesler AFB, for a total of 18 weeks. The Field Skills course is a 40-hour course taught at Hurlburt Field FL. These courses provide initial training in weather observing, atmospheric dynamics, weather computer systems, flight operations support, field skills, Doppler radar, satellite imagery interpretation, basic analysis, and weather station operations.

Personnel selected to attend forecaster training attend the Joint Weather Forecaster Course at Keesler AFB MS. Personnel attending this course complete a consolidated section first, then attend specific service-unique blocks. Air Force personnel attend the Able Forecaster course, E3AAR1W071A, which is 134 training days in length. It provides Air Force students with the knowledge and skills necessary to perform duties in a Base Weather Station.

The Weather Officer Courses are required for the award of AFSC 15W1. There are three components to these courses, totaling about 70 academic days. The Initial Weather Officer Course is taught at Keesler AFB, the Weather Officer Combat Field Skills Course is held for 5 days at Hurlburt Field FL, and the Weather Officer Course is conducted at Keesler AFB. Main topics of instruction include career development, weather support, electro-optics, skew-t analysis, weather chart analysis, satellite imagery interpretation, space weather, observing, tropical meteorology, oceanography, aviation hazards, numerical weather prediction, field skills, WSR-88D Weather Radar, Automated Weather Distribution System (AWDS), and Forecast Laboratory.

Entry into this career field currently requires an Armed Forces Vocational Aptitude Test Battery score of GENERAL - 64 and a strength factor of "H" (weight lift of 50 lbs).

SURVEY METHODOLOGY

Inventory Development

The data collection instrument for this occupational survey was USAF Job Inventory (JI) Air Force Personnel Test (AFPT) 90-1W0-098, dated December 1996. A tentative task list was prepared after reviewing pertinent career field publications and directives, pertinent tasks from the previous survey instrument, and data from the last OSR. The preliminary task list was refined and validated through personal interviews with 87 subject-matter experts at the operational training location and at the following installations:

BASE	REASON FOR VISIT
Keesler AFB MS	Resident operational training location
Peterson AFB CO	Headquarters AFSPC
Falcon AFB CO	The only space environment support capability
Fort Carson CO	Army support, contingency/mobility tasks performed here
Pope AFB NC	ACC base
Fort Bragg NC	Army support activities
Scott AFB IL	Headquarters Air Weather Service (HQ AWS)
Hurlburt Field FL	Combat Weather Facility (CWF)
Eglin AFB FL	AFMC base
Offutt AFB NE	Air Force Global Weather Central (AFGWC)
Holloman AFB NM	Holloman Solar Observatory; ACC base
Laughlin AFB TX	AETC base; validation of JI
Ft Hood TX	Validate Army support activities
Randolph AFB TX	Final review of JI

The resulting JI contains a comprehensive listing of 1,010 tasks grouped under 21 duty headings and a background section requesting such information as grade, duty title, weather function performed, organizational level, primary mission supported, space environment support (SES) products used, and equipment used or operated.

Survey Administration

From January through June 1997, Survey Control Monitors at base training offices worldwide administered the inventory to selected active duty, Air National Guard (ANG), and Reserve officer and enlisted personnel. Inventory booklets were administered to 2,976 active duty, 558 ANG, and 17 Air Force Reserve personnel (see Table 1). Personnel excluded from taking the survey included the following: (1) hospitalized personnel; (2) personnel in transition for a permanent change of station; (3) personnel retiring within the time the inventories were administered to the field; and (4) personnel in the job less than 6 weeks. Job incumbents were selected from a computer-generated mailing list obtained from personnel data tapes maintained by the Air Force Personnel Center, Randolph AFB TX.

Each individual who completed the inventory first completed an identification and biographical information section and then checked each task performed in his or her current job. After checking all tasks performed, each member then rated each of these tasks on a 9-point scale, showing relative time spent on that task, as compared to all other tasks checked. The ratings ranged from 1 (very small amount time spent) through 5 (about average time spent) to 9 (very large amount time spent).

To determine relative time spent for each task checked by a respondent, all of the incumbent's ratings are assumed to account for 100 percent of his or her time spent on the job and are summed. Each task rating is then divided by the total task ratings and multiplied by 100 to provide a relative percentage of time spent for each task. This procedure provides a basis for comparing tasks in terms of both percent members performing and average percent time spent.

Survey Sample

Personnel were selected to participate in this survey so as to ensure an accurate representation across major commands (MAJCOM) and paygrade groups. Tables 2 through 5 reflect the percentage distribution, by MAJCOM and paygrade, of active duty AFSC 1W0X1/A and 15WX/A personnel as of January 1997. The 2,378 respondents in the final sample represent 58 percent of the total assigned Weather personnel and 67 percent of the total personnel surveyed. Overall, the final survey sample is considered to be a satisfactory representation of the total Weather career field population.

Task Factor Administration

Job descriptions alone do not provide sufficient data for making decisions about career field documents or training programs. Task factor information is needed for a complete analysis of the career field. To obtain the needed task factor data, selected senior AFSC 1W0X1/A personnel (generally E-6 or E-7 craftsmen) also completed a second booklet for either training emphasis (TE) or task difficulty (TD).

TABLE 1

SUMMARY INFORMATION FOR
FINAL SURVEY SAMPLE

	ACTIVE DUTY ENLISTED	ACTIVE DUTY OFFICER	ANG ENLISTED	ANG OFFICER
Total Assigned*:	2,482	771	472	98
Total Eligible / Surveyed**:	2,262	714	461	97
Total in Survey Sample***:	1,715	457	149	41
Percent of Assigned in Sample:	69%	59%	32%	42%
Percent of Surveyed in Sample:	76%	64%	32%	42%

* Assigned strength as of January 1997

** Excludes personnel in PCS, student, or hospital status, or less than 6 weeks on the job

*** Does not reflect 15 Air Force Reserve Officers included in final survey sample

TABLE 2

MAJCOM REPRESENTATION OF ACTIVE DUTY
ENLISTED PERSONNEL IN SURVEY SAMPLE

COMMAND	PERCENT OF ACTIVE DUTY ASSIGNED* (N= 2,482)	PERCENT OF ACTIVE DUTY SAMPLE (N=1,715)
ACC	28	28
PACAF	12	12
AETC	11	11
USAFE	11	12
AFMC	7	7
AMC	8	7
AWS	13	14
AFSOC	4	3
AFSPC	5	5
OTHER	1	1

TABLE 3

MAJCOM REPRESENTATION OF ACTIVE DUTY
OFFICER PERSONNEL IN SURVEY SAMPLE

COMMAND	PERCENT OF ACTIVE DUTY ASSIGNED* (N=771)	PERCENT OF ACTIVE DUTY SAMPLE (N=457)
AWS	18	25
ACC	16	18
AETC	14	8
PACAF	9	9
USAFE	8	9
AFSPC	7	10
AFMC	6	7
AMC	6	7
HQ USAF	4	0
AFSOC	2	1
OTHER	10	6

*As of January 1997

TABLE 4

PAYGRADE DISTRIBUTION OF ACTIVE DUTY
ENLISTED SURVEY SAMPLE

GRADE	PERCENT OF ASSIGNED (N=2,482)*	PERCENT OF SAMPLE (N=1,715)
E-1 TO E-3	22	21
E-4	21	19
E-5	27	29
E-6	15	15
E-7	12	13
E-8 TO E-9	3	3

*As of January 1997

TABLE 5

PAYGRADE DISTRIBUTION OF ACTIVE DUTY
OFFICER SURVEY SAMPLE

GRADE	PERCENT OF ASSIGNED (N=771)*	PERCENT OF SAMPLE (N=457)
O-1	11	12
O-2	10	8
O-3	44	47
O-4	22	21
O-5	10	8
O-6	3	3

* Assigned strength as of January 1997

Selected senior 15WX/A personnel completed a TE booklet. These booklets were processed separately from the JIs. This information is used in a number of different analyses discussed in more detail within the report.

Training Emphasis (TE). TE is a rating of the amount of emphasis that should be placed on tasks in entry-level training. The 29 senior officers and 56 senior NCOs who completed a TE booklet were asked to select tasks they felt require some sort of structured training for entry-level personnel and then indicate how much training emphasis these tasks should receive, from 1 (extremely low emphasis) to 9 (extremely high emphasis). Structured training is defined as training provided at resident technical schools, field training detachments, mobile training teams, formal on-the-job-training (OJT), or any other organized training method.

TE data were compiled for both officer and enlisted personnel, and were used separately to analyze each group. TE data were as follows:

	AVERAGE TE	STANDARD DEVIATION	HIGH TE
OFFICER	2.28	1.85	4.13
ENLISTED	1.97	2.05	4.02

Task Difficulty (TD). TD is an estimate of the amount of time needed to learn how to do each task satisfactorily. The 53 senior NCOs who completed TD booklets were asked to rate the difficulty of each task using a 9-point scale (extremely low to extremely high). Ratings were standardized so tasks have an average difficulty of 5.00, with a standard deviation of 1.00. Any task with a TD rating of 6.00 or above is considered to be difficult to learn.

When used in conjunction with the primary criterion of percent members performing, TE and TD ratings can provide insight into first-enlistment personnel training requirements. Such insights may suggest a need for lengthening or shortening portions of instruction supporting entry-level jobs.

SPECIALTY JOBS
(Career Field Structure)

A USAF Occupational Analysis begins with an examination of the career field structure. The structure of jobs within the Weather field was examined on the basis of similarity of tasks performed and the percent of time spent ratings provided by job incumbents, independent of other specialty background factors.

Each individual in the sample performs a set of tasks called a ***Job***. For the purpose of organizing individual jobs into similar units of work, an automated job clustering program is used. This hierarchical grouping program is a basic part of the Comprehensive Occupational Data Analysis Program system for job analysis. Each individual job description (all the tasks performed by that individual and the relative amount of time spent on those tasks) in the sample is compared to every other job description in terms of tasks performed and the relative amount of time spent on each task in the JI. The automated system is

designed to locate the two job descriptions with the most similar tasks and percent time ratings and combine them to form a composite job description. In successive stages, new members are added to initial groups, or new groups are formed based on the similarity of tasks performed and similar time ratings in the individual job descriptions.

Overview of Specialty Jobs

The analysis procedure described above identified 12 jobs within the Weather survey sample. The division of jobs performed by Weather personnel is illustrated in Figure 1, and a listing of those jobs is provided below. The stage (ST) number shown beside each title is a reference to computer-printed information; the number of personnel in each group or stage (N) is also shown. As expected, two-thirds of the survey sample fell into either the Weather Forecaster or Weather Observer jobs.

I. WEATHER FORECASTER (ST122, N=1,019)

II. WEATHER OBSERVER (ST143, N=538)

III. MANAGEMENT/SUPERVISORY CLUSTER (ST032, N=404)

IV. GLOBAL WEATHER CENTRAL (ST156, N=82)

V. SATELLITE ANALYSIS (ST070, N=35)

VI. COMPUTER PROGRAMMER (ST174, N=22)

VII. CONTINGENCY/MOBILITY (ST161, N=22)

VIII. SPACE ENVIRONMENT SUPPORT (SES) (ST028, N=20)

IX. SOLAR ANALYST (ST362, N=18)

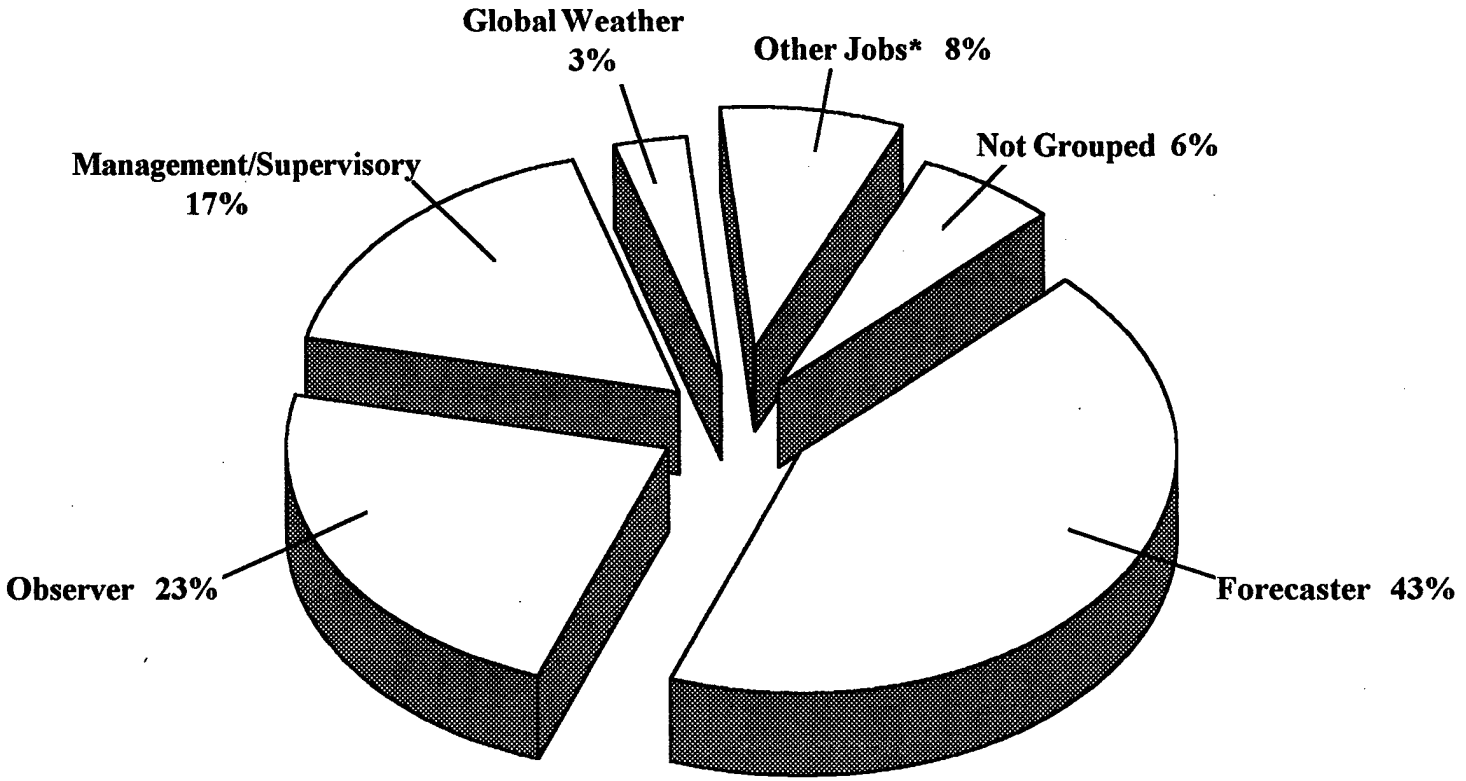
X. AERIAL WEATHER RECONNAISSANCE (ST262, N=15)

XI. TRAINING (ST284, N=15)

XII. AUTOMATED WEATHER DISTRIBUTION SYSTEM (AWDS) (ST654, N=13)

The respondents forming these jobs account for 94 percent of the survey sample. The remaining 6 percent were performing tasks or series of tasks which did not group with any of the defined jobs. Job titles given by respondents which were representative of these personnel include Acquisition Programmer, NCOIC Satellite Data, and Science and Technology Officer.

CAREER LADDER STRUCTURE
(N=2,378)



* Includes Solar Analyst, Training, Space Environment Support, Aerial Recon, AWDS, Contingency/Mobility, Satellite Analysis, and Computer Programmer

FIGURE 1

Group Descriptions

The following paragraphs contain brief descriptions of the jobs identified through the career field structure analysis. Table 6 presents the relative time spent on duties by members of these specialty jobs. Selected background data for these jobs are provided in Table 7, and the DAFSC distribution of personnel in these jobs is shown in Table 8. Representative tasks for all the jobs are contained in Appendix A.

I. WEATHER FORECASTER (ST122). The 1,019 members of this job make up the largest of two core jobs in the Weather career field, comprising 43 percent of the survey sample. They are stationed at a wide variety of locations, both in CONUS and overseas. They perform a variety of duties that include: performing general weather activities, performing weather forecasting activities, analyzing weather information, and performing AWDS activities (see Table 6). As shown in Table 7, 89 percent of the members are active duty. This group is made up of officer and enlisted members performing many of the same tasks. Typical tasks performed by members of this job include:

decode weather forecasts
conduct shift change briefings
decode meteorological (METAR) observations
amend weather forecasts
analyze Skew-T diagrams
analyze satellite data
analyze surface charts
analyze LAWCs
analyze upper-air charts
encode weather forecasts
perform meteorological watches (METWATCHs)

Within this job, most personnel are performing routine forecasting tasks and call themselves "Weather Forecaster" or "Weather Technician." There are, however, several groups within the overall job that are somewhat distinct. For example, a group of 92 ANG personnel performing Army support activities are performing both forecasting and observing tasks. Other personnel are clearly more involved with weather station operations, with forecasting taking less of their time. Common job titles for these personnel are "weather station chief," "weather NCOIC," "assistant station chiefs," or "weather superintendents."

As shown in Table 8, 75 percent of the members in this job hold DAFSCs 1W051A or 1W071A. They have an average time in service of 146 months, with almost half (49 percent) in paygrades E-4 or E-5. Members perform an average of 229 tasks, highest of any job in the career field. Only 3 percent are in their first enlistment (see Table 7).

II. WEATHER OBSERVER (ST143). This job of 538 members is the second largest in the survey sample (23 percent). As reflected in Table 6, most of their time is spent performing weather observing activities and general weather activities. Seventy-seven percent of them are located in CONUS. Eighty-nine percent are active duty personnel. Typical tasks performed by observers include:

TABLE 6

RELATIVE PERCENT TIME SPENT ON DUTIES BY SPECIALTY JOBS

DUTIES	WEATHER FORECASTER (ST122, N=1,019)	WEATHER OBSERVER (ST143, N=538)	MGMT/ SUPVRY (ST032, N=404)	GLOBAL WEATHER (ST156, (N=82)	SATELLITE ANALYSIS (ST070, N=35)	COMPUTER PROGRAMR (ST174, N=22)
A PERFORMING COMMAND, MANAGEMENT, AND STAFF ACTIVITIES	11	3	64	5	13	15
B PERFORMING TRAINING ACTIVITIES	4	2	8	3	4	3
C PERFORMING GENERAL ADMINISTRATIVE ACTIVITIES	2	1	7	1	7	4
D PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	1	1	2	1	*	2
E PERFORMING GENERAL WEATHER ACTIVITIES	16	21	4	23	14	4
F DISSEMINATING WEATHER INFORMATION	9	7	1	7	3	1
G PERFORMING WEATHER OBSERVING ACTIVITIES	8	37	*	1	3	-
H PLOTTING WEATHER INFORMATION	1	3	*	2	*	*
I PERFORMING WEATHER FORECASTING ACTIVITIES	12	1	1	18	7	-
J ANALYZING WEATHER INFORMATION	10	1	2	23	11	3
K OBSERVING WEATHER BY RADAR	6	5	1	4	*	*
L PERFORMING WEATHER SATELLITE ACTIVITIES	2	1	1	5	34	2
M PERFORMING AUTOMATED WEATHER DISTRIBUTION SYSTEM (AWDS) ACTIVITIES	9	9	1	6	*	*
N TAKING UPPER AIR OBSERVATIONS	*	1	*	*	-	-
O PERFORMING WEATHER RECONNAISSANCE AIRCRAFT ACTIVITIES	*	*	*	*	-	-
P PERFORMING COMPUTERIZED WEATHER ACTIVITIES	*	*	3	1	2	66
Q PERFORMING SPACE ENVIRONMENT SUPPORT (SES) CENTRAL ACTIVITIES	*	*	*	*	*	-
R PERFORMING SOLAR ANALYSIS ACTIVITIES	*	*	*	-	*	-
S PERFORMING SPECIAL OPERATIONS ACTIVITIES	*	*	*	-	-	-
T PERFORMING CONTINGENCY AND MOBILITY ACTIVITIES	6	4	2	*	-	*
U PERFORMING ARMY SUPPORT ACTIVITIES	1	2	*	*	-	-

* Denotes less than .5 percent

\- Denotes duty is not performed

TABLE 6 (CONTINUED)

RELATIVE PERCENT TIME SPENT ON DUTIES BY SPECIALTY JOBS

DUTIES	CONT/ MOBILITY (ST161, N=22)	SES (ST028, N=20)	SOLAR ANALYST (ST362, N=18)	AERIAL RECON WEATHER (ST262, N=15)	TRAINING (ST284, N=15)	AWDS (ST654, N=13)
A PERFORMING COMMAND, MANAGEMENT, AND STAFF ACTIVITIES	28	21	14	10	26	10
B PERFORMING TRAINING ACTIVITIES	12	5	7	5	60	6
C PERFORMING GENERAL ADMINISTRATIVE ACTIVITIES	5	5	2	1	3	2
D PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	4	1	3	1	3	2
E PERFORMING GENERAL WEATHER ACTIVITIES	7	2	7	12	3	7
F DISSEMINATING WEATHER INFORMATION	3	1	1	3	-	-
G PERFORMING WEATHER OBSERVING ACTIVITIES	*	-	-	9	-	*
H PLOTTING WEATHER INFORMATION	*	-	*	1	-	1
I PERFORMING WEATHER FORECASTING ACTIVITIES	2	-	-	2	-	*
J ANALYZING WEATHER INFORMATION	1	*	-	6	1	*
K OBSERVING WEATHER BY RADAR	*	-	-	2	-	-
L PERFORMING WEATHER SATELLITE ACTIVITIES	2	*	-	*	1	*
M PERFORMING AUTOMATED WEATHER DISTRIBUTION SYSTEM (AWDS) ACTIVITIES	2	-	-	4	*	67
N TAKING UPPER AIR OBSERVATIONS	1	-	-	-	-	-
O PERFORMING WEATHER RECONNAISSANCE AIRCRAFT ACTIVITIES	-	-	-	41	-	-
P PERFORMING COMPUTERIZED WEATHER ACTIVITIES	1	*	1	1	*	4
Q PERFORMING SPACE ENVIRONMENT SUPPORT (SES) CENTRAL ACTIVITIES	-	62	4	-	*	-
R PERFORMING SOLAR ANALYSIS ACTIVITIES	-	3	61	-	*	-
S PERFORMING SPECIAL OPERATIONS ACTIVITIES	*	-	-	-	-	-
T PERFORMING CONTINGENCY AND MOBILITY ACTIVITIES	26	-	*	*	1	*
U PERFORMING ARMY SUPPORT ACTIVITIES	5	-	-	-	1	-

* Denotes less than .5 percent

\- Denotes duty is not performed

TABLE 7

SELECTED BACKGROUND DATA FOR SPECIALTY JOBS

	WEATHER FORECASTER (ST122)	WEATHER OBSERVER (ST143)	MGMT/ SUPVRY (ST032)	GLOBAL WEATHER (ST156)	SATELLITE ANALYSIS (ST070)	COMPUTER PROGRAMR (ST174)
NUMBER IN GROUP	1,019	538	404	82	35	22
PERCENT OF SAMPLE	43%	23%	17%	3%	1%	1%
PERCENT IN CONUS	68%	77%	85%	84%	83%	100%
PAYGRADE DISTRIBUTION						
E-1 to E-3	2%	65%	0%	0%	0%	0%
E-4/E-5	49%	34%	3%	75%	60%	40%
E-6/E-7	29%	1%	30%	17%	38%	10%
E-8/E-9	2%	0%	8%	0%	0%	0%
O-1 to O-2	8%	0%	1%	7%	0%	0%
O-3/O-4	9%	0%	46%	1%	3%	50%
O-5/O-6	1%	0%	11%	0%	0%	0%
COMPONENT STATUS						
ACTIVE DUTY	89%	89%	99%	100%	100%	100%
AIR NATIONAL GUARD	11%	11%	1%	0%	0%	0%
RESERVES	0%	0%	0%	0%	0%	0%
AVERAGE MONTHS IN SERVICE (AD ENLISTED ONLY)	146	29	222	147	171	154
AVERAGE MONTHS ACTIVE COMMISSION TIME (AD OFFICERS ONLY)	65	N/A	152	22	69	84
PERCENT OF ENLISTED WITH 1-48 MOS TAFMS (AD ONLY)	3%	90%	0%	1%	0%	0%
PERCENT OF OFFICERS WITH 1-48 MOS TIUF (AD ONLY)	50%	N/A	4%	85%	0%	9%
PERCENT SUPERVISING	65%	4%	63%	37%	37%	27%
AVERAGE NUMBER OF TASKS PERFORMED	229	111	80	69	39	34

TABLE 7 (CONTINUED)

SELECTED BACKGROUND DATA FOR SPECIALTY JOBS

	CONTINGENCY/ MOBILITY (ST161)	SES (ST028)	SOLAR ANALYST (ST362)	AERIAL RECON (ST262)	TRAINING (ST284)	AWDS (ST654)
NUMBER IN GROUP	22	20	18	15	15	13
PERCENT OF SAMPLE	1%	1%	1%	1%	1%	1%
PERCENT IN CONUS	77%	100%	11%	100%	100%	85%
PAYGRADE DISTRIBUTION						
E-1 to E-3	0%	10%	0%	0%	0%	0%
E-4/E-5	5%	20%	61%	0%	33%	46%
E-6/E-7	46%	30%	39%	0%	40%	39%
E-8/E-9	0%	10%	0%	0%	0%	0%
O-1/O-2	9%	0%	0%	0%	0%	0%
O-3/O-4	40%	30%	0%	93%	20%	15%
O-5/O-6	0%	0%	0%	7%	7%	0%
COMPONENT STATUS						
ACTIVE DUTY	95%	100%	100%	0%	100%	100%
AIR NATIONAL GUARD	5%	0%	0%	0%	0%	0%
RESERVES	0%	0%	0%	100%	0%	0%
AVERAGE MONTHS IN SERVICE (AD ENLISTED ONLY)	192	153	140	-	174	166
AVERAGE MONTHS ACTIVE COMMISSION TIME (AD OFFICERS ONLY)	90	105	-	-	118	90
PERCENT OF ENLISTED WITH 1-48 MOS TAFMS (AD ONLY)	0%	0%	16%	-	0%	0%
PERCENT OF OFFICERS WITH 1-48 MOS TIUF (AD ONLY)	20%	17%	-	-	25%	0%
PERCENT SUPERVISING	82%	55%	33%	7%	13%	23%
AVERAGE NUMBER OF TASKS PERFORMED	180	80	76	83	36	72

TABLE 8

DAFSC DISTRIBUTION DATA FOR SPECIALTY JOBS
(PERCENT MEMBERS RESPONDING)

	WEATHER FORECASTER (ST122) (N=1,019)	WEATHER OBSERVER (ST143) (N=538)	MGMT/ SUPVRY (ST032) (N=404)	GLOBAL WEATHER (ST156) (N=82)	SATELLITE ANALYSIS (ST070) (N=35)	COMPUTER PROGRAMMER (ST174) (N=22)
DAFSC DISTRIBUTION:						
1W031	1	72	-	-	-	-
1W051	3	20	-	2	-	-
1W091	3	-	6	-	-	-
1W000	-	-	2	-	-	-
1W031A	1	-	-	-	-	-
1W051A	41	4	3	62	35	23
1W071A	34	3	29	27	63	27
15W1	4	-	0	6	-	-
15W3	13	-	20	-	-	9
15W4	1	-	20	-	-	-
15W1A	-	-	2	1	2	23
15W3A	1	-	17	1	-	18
15W4A	-	-	-	-	-	-
AIR FORCE RESERVE 15W3	-	-	-	-	-	-

* Denotes less than .5 percent

TABLE 8 (CONTINUED)

DAFSC DISTRIBUTION DATA FOR SPECIALTY JOBS
(PERCENT MEMBERS RESPONDING)

	CONTINGENCY/ MOBILITY (ST161) (N=22)	SES (ST028) (N=20)	SOLAR ANALYST (ST362) (N=18)	AERIAL RECON WEATHER (ST262) (N=15)	TRAINING (ST284) (N=15)	AWDS (ST654) (N=13)
DAFSC DISTRIBUTION:						
1W031	-	10	-	-	-	-
1W051	-	15	-	-	-	-
1W091	-	5	-	-	-	-
1W000	-	-	-	-	-	-
1W031A	-	-	-	-	-	-
1W051A	5	15	61	-	27	46
1W071A	45	25	39	-	47	38
15W1	-	-	-	-	-	-
15W3	50	-	-	-	7	15
15W4	-	-	-	-	-	-
15W1A	-	-	-	-	7	-
15W3A	-	30	-	-	13	-
15W4A	-	-	-	-	-	-
AIR FORCE RESERVE 15W3	-	-	-	100	-	-

* Denotes less than .5 percent

determine cloud types
determine ceiling
determine precipitation types and intensities
determine number and amount of coverage of cloud layers
estimate heights of cloud layers
encode surface observations
determine wind speeds, directions, and characteristics
determine existence, types, and amounts of obscurations
determine horizontal visibilities
inform forecasters of weather conditions
determine vertical visibilities

Several smaller and distinct jobs are seen within this large job. For example, a small group of personnel are involved with rawinsonde and range operations. Other personnel indicated they are involved with army support as members of a cadre weather team, and are somewhat more involved with mobility and contingency tasks in addition to their observing tasks. Finally, a small group of Keesler instructors are also included within this job who are teaching in the basic Observer course.

As shown in Tables 7 and 8, personnel in the Weather Observer Job are typically junior in grade, with 65 percent in the E-1 to E-3 paygrades and 72 percent at the 3-skill level. They also have a low average time in service of only 29 months. They perform an average of 111 tasks, third highest of any job. Ninety percent are in their first enlistment.

III. MANAGEMENT/SUPERVISORY CLUSTER (ST032). This job contains 404 members, most of whom are active duty. It comprises 17 percent of the survey sample and consists of various jobs, all of which are managerial or supervisory in nature. For example, many members reported such job titles as weather flight commander, project manager, section chief, officer in charge, and noncommissioned officer in charge (NCOIC). They spend a large amount of their time on upper-level duties such as performing command, management, and staff activities (see Table 6). The tasks that they perform also reflect the managerial and supervisory nature of the job:

conduct briefings or presentations
participate in general meetings, such as staff meetings, briefings, conferences, or workshops, other than conducting
conduct general meetings, such as staff meetings, briefings, conferences, or workshops
write memoranda for records (MFRs)
write background papers, point papers, or talking papers
compile information for staff studies, staff summary sheets, or position papers
counsel subordinates concerning personal matters
write award or decoration nomination packages
conduct cross-staff coordination
determine or establish work assignments or priorities
supervise military personnel

Most of the members of this job are senior enlisted personnel or officers. From data presented in Tables 7 and 8, 38 percent of the members are in paygrade E-7 and above, 28 percent are Captains, and 18 percent are Majors. Forty-two percent of these members are in AWS, and 85 percent are in CONUS. Enlisted members have an average of 222 months time in service, while officers have 152 months commission time. Members perform an average of 80 tasks. Sixty-three percent supervise other personnel.

IV. GLOBAL WEATHER CENTRAL (ST156). These 82 members comprise 3 percent of the survey sample. They spend 51 percent of their job time analyzing weather information and performing weather forecasting activities (see Table 6). Seventy-one percent are assigned to AWS, with most assigned to the Air Force Global Weather Center at Offutt AFB. Fifty-nine percent indicate their job title as "Weather Central Forecaster." Performing an average of 69 tasks, commonly performed tasks include:

perform synoptic scale forecasting techniques
analyze satellite data
analyze upper-air charts
analyze surface charts
display satellite imageries
analyze vorticity charts

As reflected in Tables 7 and 8, all of these personnel are active duty. Eighty-nine percent hold DAFSC 1W051A or 1W071A. Seventy-five percent are in paygrades E-4 or E-5. Their average time in service is 147 months, with only 1 percent in their first enlistment.

V. SATELLITE ANALYSIS (ST070). Six of the 35 members of this specialty job are stationed at Anderson AFB, while the remaining 29 are stationed at Offutt AFB. They spend much of their time performing weather satellite activities, spending more time performing this duty than any other job group (see Table 6). Typical tasks include:

display satellite imageries
enhance satellite imageries
interpret satellite schedule products
analyze satellite data
create satellite loops
grid satellite imageries
perform quality control analyses of satellite imageries
clean weather facilities
conduct OJT
compute times of satellite pictures
maintain satellite imagery reference files

Data presented in Tables 7 and 8 show that 57 percent of this group are in the E-5 paygrade, and they almost exclusively hold DAFSC 1W051A or 1W071A. They have an average 171 months time in service. They perform a low number of tasks, averaging only 39 tasks performed. Eighty-three percent of this group are in AWS.

VI. COMPUTER PROGRAMMER (ST174). The 22 members in this specialty job spend more time than any other job group performing computerized weather activities (66 percent, see Table 6). Fourteen are stationed at Offutt AFB, and all 22 members are stationed in CONUS. On the average, they perform only 34 tasks, some of which include:

update computer software
write computer runstreams
develop computer software
perform computer software maintenance
test weather computer software
write computer software codes
evaluate effectiveness of weather computer software
prepare computer software documentation
determine flow sequences of computer software
submit computer runstreams
assemble weather computer software

As indicated in Table 8, 50 percent of this group are Captains, and 36 percent are Staff Sergeants. Background data shown in Table 7 shows that the average time in service for the enlisted members is 132 months. Officers have an average of 84 months active commission time. Ninety-one percent are in AWS. All are active duty.

VII. CONTINGENCY/MOBILITY (ST161). The 22 members of this job spend 26 percent of their time performing contingency and mobility activities and 28 percent of their time performing command, management, and staff activities (see Table 6). Ninety-five percent are active duty. Uniquely performed tasks include:

plan deployments of equipment or personnel
determine equipment requirements for mobility exercises or deployments
conduct mobility training
determine personnel requirements for mobility exercises or deployments
conduct mobility exercise or deployment site surveys
pack contingency equipment
develop inputs to mobility, contingency, disaster preparedness, or unit emergency or alert plans
develop mobility exercise or deployment checklists
operate TACMET equipment

determine personnel tasking requirements for mobility exercises or deployments
schedule personnel for mobility training, exercises, or deployments

As shown in Tables 7 and 8, this job is comprised of both enlisted and officer personnel. Most are assigned to a squadron or flight rather than at the MAJCOM level. Forty-five percent hold a DAFSC of 1W071A and 50 percent are officers with DAFSC 15W3. The enlisted members have an average of 192 months in service, while the officers have 90 months of commission time. Members perform an average of 180 tasks, second highest of all the jobs identified. Eighty-two percent supervise other subordinates.

VIII. SPACE ENVIRONMENT SUPPORT (SES) (ST028). The 20 members of this specialty job comprise only 1 percent of the survey sample and are primarily responsible for performing SES activities. They spend 63 percent of their time performing such duties, more than any other specialty job (see Table 6). Some of the average 80 tasks they perform are:

operate Space Environment Laboratories Data Acquisition Display Systems (SELDADSs)
prepare and transmit 3-hour Ap summaries
prepare and transmit daily space environment summaries
prepare and transmit geomagnetic event in-progress reports
prepare and transmit 7-day Ap forecast bulletins
prepare and transmit geomagnetic event forecast/warning reports
prepare and transmit 45-day Ap/F10 forecast bulletins
perform Shock Time of Arrival (STOA) model input and analysis procedures
perform Proton Prediction System (PPS) model input and analysis procedures
prepare and transmit HF useable frequency bulletins
prepare and transmit primary HF radio propagation reports

All of these members are assigned to AFSPC, with all but one of these personnel stationed at Falcon AFB. As reflected in Tables 7 and 8, 25 percent are Captains and 50 percent are enlisted personnel in paygrades E-4 through E-7. All are in active duty status.

IX. SOLAR ANALYST (ST362). These 18 members are all active duty enlisted personnel. They primarily perform solar analysis activities, but they also perform some managerial tasks (see Table 6). Eighty-one percent of this group are assigned to a location outside CONUS. Typical tasks of this job include:

prepare and transmit optical and radio status messages
prepare and transmit event-level solar activities
operate optical telescopes

analyze Digital Image Processing Systems (DIPSs)
analyze or report white light activities
transmit daily equipment summaries
perform flare patrols in semiautomatic mode
perform solar archival activities
perform image rotator checks
perform flare patrols in automatic mode
annotate solar analysis data collection forms

This group performs an average of 76 tasks. As shown in Tables 7 and 8, 61 percent of these personnel hold DAFSC 1W051A, and 39 percent hold DAFSC 1W071A. Sixty-one percent are in paygrade E-5. All 18 members are in AFSPC. Their average time in service is 140 months.

X. AERIAL WEATHER RECONNAISSANCE (ST262). This group of 15 members is primarily responsible for performing weather reconnaissance activities. All 15 are Air Force Reserve officers with DAFSC 15W3. Typical tasks performed by members of this job include:

perform flight crew checklist tasks
encode horizontal observation data
disseminate weather reconnaissance data
conduct tropical cyclone mission procedures
encode tropical cyclone vortex data
perform meteorological systems calibration procedures
archive weather reconnaissance mission meteorological data
evaluate aircraft platform data for dropsonde release
perform preflight inspections of weather reconnaissance aircraft
encode tropical cyclone supplementary vortex data
perform postflight procedures

All 15 members of this job are stationed at Keesler AFB. As shown in Table 7, they hold paygrades O-3 through O-5. They perform 83 tasks on the average.

XI. TRAINING (ST284). The 15 members of this job are all in active duty and are stationed in the CONUS. They basically perform training and command, management, and staff activities (see Table 6). They perform few tasks, averaging only 34. Some typical tasks performed are:

conduct formal classroom training
administer or score tests
write test questions
counsel trainees on training progress
write lesson plans
critique tests
evaluate progress of trainees

maintain training records or files
conduct briefings or presentations
write letters of counseling
conduct skill performance tests

As shown in Table 7, personnel in this group primarily hold an E-5, E-6, or E-7 paygrade. They average 174 months time in service. Ninety-three percent are in AETC, with most being stationed at Keesler AFB.

XII. AUTOMATED WEATHER DISTRIBUTION SYSTEM (AWDS) (ST654). The 13 active duty members making up this small group are responsible for performing predominately AWDS activities, spending 67 percent of their time on such activities (see Table 6). Sixty-nine percent are assigned to AWS. About half of the members are stationed at Offutt AFB. Among the 72 average tasks performed are:

troubleshoot AWDS deficiencies or outages
report and track AWDS deficiencies or outages
perform AWDS restart procedures
monitor line status's of AWDS
perform AWDS startup or shutdown procedures for Graphics Work Stations
monitor receipt of AWDS weather data
delete AWDS products
perform AWDS startup or shutdown procedures for Meteorological Processor (MP) or Communications Management (CM) Systems
display AWDS products
generate AWDS horizontal products
perform AWDS command sequences

This group averages 154 months time in service. Forty-six percent hold DAFSC 1W051A, and 39 percent hold DAFSC 1W071A. They are primarily in paygrades E-5 and E-6 (see Tables 7 and 8).

Comparison of Current Jobs to Previous Survey Findings

The results of the specialty job analysis were compared to those of OSR AFPT 90-251-87A, Weather (old AFSC 251X0), published in June 1992. After reviewing the tasks comprising the jobs identified in 1992, most of those groups could be linked to similar jobs in the current study (see Table 9). The Weather Forecaster Job in the current study was broken down into two jobs in 1992: Weather Forecaster and Duty Forecaster. Likewise, the six jobs identified in 1992; Weather Observer, Radar Observer, Plotter, Weather Central, Global Weather Observer, and Upper Air Observer; were combined into the single Weather Observer Job in the current survey.

TABLE 9

SPECIALTY JOB COMPARISONS BETWEEN CURRENT AND 1992 SURVEYS

CURRENT SURVEY (OFFICER & ENLISTED) (N=2,378)	PERCENT OF SAMPLE	1992 SURVEY (ENLISTED ONLY) (N=1,683)	PERCENT OF SAMPLE
I. WEATHER FORECASTER	43	WEATHER FORECASTER	40
		DUTY FORECASTER	1
II. WEATHER OBSERVER	23	WEATHER OBSERVER	31
		RADAR OBSERVER	1
		PLOTTER	1
		WEATHER CENTRAL	*
		GLOBAL WEATHER OBSERVER	1
		UPPER AIR OBSERVER	2
III. MANAGEMENT/SUPERVISORY	17	MANAGER	1
		SUPERVISOR	7
IV. GLOBAL WEATHER CENTRAL	3	SEVERE WEATHER FORECASTER	1
		ANALYSIS	2
V. SATELLITE OPERATIONS	1	NOT IDENTIFIED	-
VI. COMPUTER PROGRAMMER	1	DATA PROCESSING	2
		DATA MONITOR	*
		DATA CONTROLLER	*
VII. MOBILITY/CONTINGENCY	1	NOT IDENTIFIED	-
VIII. SPACE ENVIRONMENT SUPPORT	1	SPACE ENVIRONMENT	1
IX. SOLAR ANALYST	1	SPACE ENVIRONMENT	1
X. AERIAL RECON WEATHER	1	NOT IDENTIFIED	-
XI. TRAINING	1	NOT IDENTIFIED	-
XII. AWDS	1	AWDS SYSTEM MANAGER	1
		METWATCH OBSERVER	*
NOT IDENTIFIED	-	CONTINGENCY SUPPORT	1

* Denotes less than .5 percent

Eight of the 12 jobs in the current study were also identified in 1992. The jobs that were not identified in the last survey are Satellite Operations, Training, Mobility/Contingency, and Aerial Recon Weather. Only one job identified in 1992, Contingency Support, was not identified in the current study. While the titles of that job and the current Mobility/Contingency Job sound similar, analysis of the tasks and duties performed by personnel in both jobs clearly show they are quite different. In terms of overall percent of the sample, the proportions of personnel in the various specialty jobs were similar between the two surveys.

Job Satisfaction

An examination of the job satisfaction indicators of various groups can give career field managers a better understanding of some of the factors which may affect the job performance of airmen in the career field. Questions covering job interest, perceived utilization of talents and training, sense of accomplishment from work, and reenlistment intent were included in the survey booklet to provide indications of job satisfaction.

In Table 10, review of the job satisfaction data for personnel in the specialty jobs identified in this survey suggests that the job people in this career field are performing has an impact on how they perceive their level of satisfaction. The specialty jobs rated highest in job satisfaction are Aerial Recon Weather, AWDS, and Training. Those that reported low job satisfaction ratings were Global Weather Central, Weather Observer, Satellite Analysis, and SES.

Summary

Twelve jobs were identified in the career field structure analysis. Ten of the jobs were directly involved in performing the technical duties and tasks pertaining to various weather activities. Two of these, Weather Forecaster and Weather Observer, are the core jobs of the career field, making up 66 percent of the survey sample. The remaining two jobs were characterized by staff, supervisory, or training activities.

TABLE 10

COMPARISONS OF JOB SATISFACTION INDICATORS BY SPECIALTY JOBS
(PERCENT MEMBERS RESPONDING)

	WEATHER FORECASTER (ST122, N=1,019)	WEATHER OBSERVER (ST143, N=538)	MGMT/ SUPVRY (ST032, N=404)	GLOBAL WEATHER (ST156, N=82)	SATELLITE ANALYSIS (ST070, N=35)	COMPUTER PROGRAMR (ST174, N=22)
EXPRESSED JOB INTEREST:						
INTERESTING	81	62	85	59	60	86
SO-SO	12	18	9	13	9	9
DULL	7	20	6	28	31	5
PERCEIVED UTILIZATION OF TALENTS:						
FAIRLY GOOD TO PERFECT	89	72	90	72	63	73
LITTLE OR NOT AT ALL	11	28	10	28	37	27
PERCEIVED UTILIZATION OF TRAINING:						
FAIRLY GOOD TO PERFECT	92	91	73	77	46	59
LITTLE OR NOT AT ALL	8	9	27	23	54	41
SENSE OF ACCOMPLISHMENT GAINED FROM WORK:						
SATISFIED	68	57	79	51	49	77
NEUTRAL	8	16	4	12	20	9
DISSATISFIED	24	27	17	37	31	14
REENLISTMENT INTENTIONS*						
YES OR PROBABLY YES	64	45	50	72	70	27
NO OR PROBABLY NO	21	54	15	13	15	45
PLAN TO RETIRE	14	0	34	13	15	27

* Active Duty enlisted personnel only

NOTE: Columns may not add to 100 percent due to rounding or no response

TABLE 10 (CONTINUED)

COMPARISONS OF JOB SATISFACTION INDICATORS BY SPECIALTY JOBS
(PERCENT MEMBERS RESPONDING)

	CONTINGENCY MOBILITY (ST161, N=22)	SES (ST028, N=20)	SOLAR ANALYST (ST362, N=18)	AERIAL RECON WEATHER (ST262, N=15)	TRAINING (ST284, N=15)	AWDS (ST654, N=13)
EXPRESSED JOB INTEREST:						
INTERESTING	86	70	83	100	93	100
SO-SO	14	10	6	0	7	0
DULL	0	20	11	0	0	0
PERCEIVED UTILIZATION OF TALENTS:						
FAIRLY GOOD TO PERFECT	95	60	89	100	87	100
LITTLE OR NOT AT ALL	5	40	11	0	13	0
PERCEIVED UTILIZATION OF TRAINING:						
FAIRLY GOOD TO PERFECT	91	45	83	100	87	62
LITTLE OR NOT AT ALL	10	55	17	0	13	38
SENSE OF ACCOMPLISHMENT GAINED FROM WORK:						
SATISFIED	86	50	72	100	93	100
NEUTRAL	9	10	22	0	0	0
DISSATISFIED	5	40	6	0	7	0
REENLISTMENT INTENTIONS*						
YES OR PROBABLY YES	73	50	89	-	45	64
NO OR PROBABLY NO	9	36	11	-	18	18
PLAN TO RETIRE	18	14	0	-	36	18

* Active Duty enlisted personnel only

NOTE: Columns may not add to 100 percent due to rounding or no response

AFSC 1W0X1/A
ANALYSES

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AFSC 1W0X1/A

ANALYSIS OF DAFSC GROUPS

An analysis of DAFSC groups, in conjunction with the analysis of the career field structure, is an important part of each occupational survey. The DAFSC analysis identifies differences in tasks performed at the various skill levels. This information may then be used to evaluate how well career field documents, such as AFMAN 36-2108 *Specialty Descriptions* and the Specialty Training Standard, reflect what career field personnel are actually doing in the field.

The distribution of skill-level groups across the career field jobs is displayed in Table 11, while Table 12 offers another perspective by displaying the relative time spent on each duty across the skill-level groups. A clear pattern of career progression is seen, with personnel at the 3- and 5-skill levels spending more of their relative time on duties involving weather observing activities. At the 5-skill level, personnel may take one of two paths. A small number continue to perform weather observing tasks, while the largest percent of these personnel obtain an A-shred and begin transitioning to weather forecasting activities. At the 7-skill level, personnel take on the role of supervisors, while still performing many forecasting tasks. At the 9- and CEM skill levels, personnel are clearly serving as managers or supervisors.

Skill-Level Descriptions

ACTIVE DUTY DAFSC 1W031. The 415 active-duty 3-skill level personnel in the survey sample perform an average of 109 tasks. As shown in Table 11, personnel in this group are overwhelmingly found in the Weather Observer Job (94 percent). Performing a highly technical job, 35 percent of their relative duty time is devoted to weather observing activities. General weather activities accounted for another 22 percent of their time (see Table 12). Table 13 displays representative tasks performed by the highest percentages of these airmen. A review of all the tasks performed by group members revealed that weather observing tasks are highly prevalent in the active-duty 3-skill level.

ACTIVE DUTY DAFSC 1W051. The 89 active-duty 5-skill level personnel in the survey sample perform many of the same tasks as DAFSC 1W031 personnel. The scope of the job performed by these airmen is also somewhat similar to that of the 3-skill level group (115 average tasks versus an average of only 109 tasks, respectively). Five-skill level personnel are found in 4 of the 12 specialty jobs, with 68 percent working in the Weather Observer Job (see Table 11). Twenty-six percent of their relative time is spent on duties directly involved in weather observing, and another 21 percent of their relative time is spent on general weather activities (see Table 12). Table 14 displays those tasks performed by the highest percentages of these airmen. As with the 3-skill level group, most of the tasks are related to weather observing activities. Table 15 displays those tasks which best reflect differences between the active duty 3- and 5-skill level groups. This table reveals that both groups are involved with weather observing activities, but more of the 5-skill level personnel are beginning to perform training and weather information analysis tasks.

ACTIVE DUTY DAFSC 1W031A. The nine active-duty airmen holding the 3-skill level with the A-shred appear to be transitioning from an observer role to a forecaster role. Eight of the nine members fell into the Weather Forecaster Job (see Table 11). However, Table 12 shows that this group is still

TABLE 11

DISTRIBUTION OF DAFSC 1W0X1/A GROUP MEMBERS ACROSS SPECIALTY JOBS
(PERCENT RESPONDING)

SPECIALTY JOBS	ACTIVE DUTY						
	DAFSC 1W031 (N=415)	DAFSC 1W051 (N=89)	DAFSC 1W031A (N=9)	DAFSC 1W051A (N=597)	DAFSC 1W071A (N=555)	DAFSC 1W091 (N=41)	DAFSC 1W000 (N=9)
I. WEATHER FORECASTER	2	10	89	70	54	34	11
II. WEATHER OBSERVER	94	68	11	4	1	-	-
III. MGMT/SUPERVISORY	-	-	-	2	21	63	89
IV. GLOBAL WEATHER	-	2	-	8	4	-	-
V. SATELLITE ANALYSIS	-	-	-	2	4	-	-
VI. COMPUTER PROGRAMMER	-	-	-	1	1	-	-
VII. MOBILITY/CONTINGENCY	-	-	-	*	2	-	-
VIII. SES	*	3	-	*	1	2	-
IX. SOLAR ANALYST	-	-	-	2	1	-	-
X. AERIAL RECON WEATHER	-	-	-	-	-	-	-
XI. TRAINING	-	-	-	1	1	-	-
XII. AWDS	-	-	-	1	1	-	-
NOT GROUPED	4	17	-	9	9	1	-

* Denotes less than .5 percent
\- Denotes no members

TABLE 11 (CONTINUED)

DISTRIBUTION OF DAFSC 1W0X1/A GROUP MEMBERS ACROSS SPECIALTY JOBS
(PERCENT RESPONDING)

SPECIALTY JOBS	AIR NATIONAL GUARD		
	DAFSC 1W051 (N=74)	DAFSC 1W071A (N=59)	DAFSC 1W091 ((N=14)
I. WEATHER FORECASTER	30	75	86
II. WEATHER OBSERVER	65	14	-
III. MANAGEMENT/SUPERVISORY	-	2	-
IV. GLOBAL WEATHER CENTRAL	-	-	-
V. SATELLITE ANALYSIS	-	-	-
VI. COMPUTER PROGRAMMER	-	-	-
VII. MOBILITY/CONTINGENCY	-	-	-
VIII. SES	-	-	-
IX. SOLAR ANALYST	-	-	-
X. AERIAL RECON WEATHER	-	-	-
XI. TRAINING	-	-	-
XII. AWDS	-	-	-
NOT GROUPED	5	9	14

* Denotes less than .5 percent
\- Denotes no members

TABLE 12

RELATIVE PERCENT TIME SPENT ON DUTIES BY DAFSC 1W0X1/A GROUPS

DUTIES		ACTIVE DUTY						
		DAFSC 1W031 (N=415)	DAFSC 1W051 (N=89)	DAFSC 1W031A (N=9)	DAFSC 1W051A (N=597)	DAFSC 1W071A (N=555)	DAFSC 1W091 (N=41)	DAFSC 1W000 (N=9)
A	PERFORMING COMMAND, MANAGEMENT, AND STAFF ACTIVITIES	3	5	2	7	24	58	77
B	PERFORMING TRAINING ACTIVITIES	1	3	1	4	9	10	5
C	PERFORMING GENERAL ADMINISTRATIVE ACTIVITIES	1	3	1	2	4	6	6
D	PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	1	1	*	2	3	2	1
E	PERFORMING GENERAL WEATHER ACTIVITIES	22	21	16	17	12	6	3
F	DISSEMINATING WEATHER INFORMATION	8	7	11	8	5	2	1
G	PERFORMING WEATHER OBSERVING ACTIVITIES	35	26	19	8	4	1	*
H	PLOTTING WEATHER INFORMATION	2	2	2	1	1	*	-
I	PERFORMING WEATHER FORECASTING ACTIVITIES	1	2	14	12	8	3	1
J	ANALYZING WEATHER INFORMATION	1	4	10	11	7	2	1
K	OBSERVING WEATHER BY RADAR	6	4	9	6	3	2	-
L	PERFORMING WEATHER SATELLITE ACTIVITIES	1	1	1	3	3	*	1
M	PERFORMING AUTOMATED WEATHER DISTRIBUTION SYSTEM (AWDS) ACTIVITIES	10	10	12	10	7	2	3
N	TAKING UPPER AIR OBSERVATIONS	2	1	-	*	*	*	*
O	PERFORMING WEATHER RECONNAISSANCE AIRCRAFT ACTIVITIES	*	*	-	*	*	-	-
P	PERFORMING COMPUTERIZED WEATHER ACTIVITIES	*	2	*	2	2	*	1
Q	PERFORMING SPACE ENVIRONMENT SUPPORT (SES) CENTRAL ACTIVITIES	*	2	-	1	1	1	-
R	PERFORMING SOLAR ANALYSIS ACTIVITIES	*	*	-	1	1	*	-
S	PERFORMING SPECIAL OPERATIONS ACTIVITIES	*	*	-	*	*	*	-
T	PERFORMING CONTINGENCY AND MOBILITY ACTIVITIES	4	3	1	4	4	2	1
U	PERFORMING ARMY SUPPORT ACTIVITIES	1	1	1	1	1	*	-

* Denotes less than .5 percent

\- Denotes no members

TABLE 12 (CONTINUED)

RELATIVE PERCENT TIME SPENT ON DUTIES BY DAFSC 1W0X1/A GROUPS

DUTIES		AIR NATIONAL GUARD		
		DAFSC 1W051 (N=74)	DAFSC 1W071A (N=59)	DAFSC 1W091 (N=14)
A	PERFORMING COMMAND, MANAGEMENT, AND STAFF ACTIVITIES	5	10	21
B	PERFORMING TRAINING ACTIVITIES	3	7	9
C	PERFORMING GENERAL ADMINISTRATIVE ACTIVITIES	1	2	4
D	PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	2	2	3
E	PERFORMING GENERAL WEATHER ACTIVITIES	17	15	11
F	DISSEMINATING WEATHER INFORMATION	4	6	5
G	PERFORMING WEATHER OBSERVING ACTIVITIES	34	17	8
H	PLOTTING WEATHER INFORMATION	5	3	2
I	PERFORMING WEATHER FORECASTING ACTIVITIES	6	10	9
J	ANALYZING WEATHER INFORMATION	6	9	7
K	OBSERVING WEATHER BY RADAR	*	*	*
L	PERFORMING WEATHER SATELLITE ACTIVITIES	1	1	1
M	PERFORMING AUTOMATED WEATHER DISTRIBUTION SYSTEM (AWDS) ACTIVITIES	*	1	*
N	TAKING UPPER AIR OBSERVATIONS	-	*	-
O	PERFORMING WEATHER RECONNAISSANCE AIRCRAFT ACTIVITIES	*	-	-
P	PERFORMING COMPUTERIZED WEATHER ACTIVITIES	1	*	*
Q	PERFORMING SPACE ENVIRONMENT SUPPORT (SES) CENTRAL ACTIVITIES	-	*	-
R	PERFORMING SOLAR ANALYSIS ACTIVITIES	-	*	-
S	PERFORMING SPECIAL OPERATIONS ACTIVITIES	*	*	*
T	PERFORMING CONTINGENCY AND MOBILITY ACTIVITIES	11	10	15
U	PERFORMING ARMY SUPPORT ACTIVITIES	5	5	5

* Denotes less than .5 percent
\- Denotes no members

TABLE 13

REPRESENTATIVE TASKS PERFORMED BY ACTIVE DUTY 1W031 PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=415)
G430	Determine number and amount of coverage of cloud layers	94
G422	Determine cloud types	94
G421	Determine ceiling	94
G433	Estimate heights of cloud layers	94
G425	Determine precipitation types and intensities	94
G431	Encode surface observations	93
G435	Inform forecasters of weather conditions	93
G427	Determine wind speeds, directions, and characteristics	93
G429	Determine existence, types, and amounts of obscurations	93
G426	Determine vertical visibilities	93
G424	Determine horizontal visibilities	92
G423	Determine dew points	92
G437	Measure precipitation	92
E316	Encode weather observations	89
G441	Perform barometer comparisons	89
G440	Measure heights of cloud layers	88
F403	Disseminate weather observations	87
G420	Determine barometric pressures and tendencies	87
E358	Replace paper, ribbons, or ink on weather equipment	86
E300	Decode meteorological (METAR) observations	85
G416	Compute sea level pressures	85
E364	Verify accuracy of clocks	85
G428	Determine existence, types, amounts, and trends of distant phenomenas	84
G407	Compute altimeter settings	84
E355	Record or encode METAR codes	83
E293	Clean weather facilities	83
M607	Acknowledge alerts on AWDS work stations	82
G434	Inform ATCs of weather conditions	81
G417	Compute station pressures	81
G414	Compute relative humidities	81
G432	Estimate precipitation	81
G445	Read dry or wet bulb temperatures	81
F378	Conduct shift change briefings	80
E337	Perform pilot-to-METRO service (PMSV) contacts	80
E307	Decode weather forecasts	78
E301	Decode pilot reports (PIREPs)	73
G415	Compute runway visual ranges (RVRs)	72
G413	Compute pressure altitudes	72
E326	Make entries in station logs	70
G412	Compute magnetic and true wind directions	69
E356	Record or encode PIREPs	69

Average number of tasks performed - 109

TABLE 14

REPRESENTATIVE TASKS PERFORMED BY ACTIVE DUTY 1W051 PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=89)
E293	Clean weather facilities	85
F378	Conduct shift change briefings	78
E316	Encode weather observations	78
M607	Acknowledge alerts on AWDS work stations	78
G431	Encode surface observations	75
G422	Determine cloud types	75
E300	Decode meteorological (METAR) observations	75
G424	Determine horizontal visibilities	74
G430	Determine number and amount of coverage of cloud layers	74
G421	Determine ceiling	74
G433	Estimate heights of cloud layers	74
E364	Verify accuracy of clocks	74
G425	Determine precipitation types and intensities	73
G427	Determine wind speeds, directions, and characteristics	73
G435	Inform forecasters of weather conditions	72
G429	Determine existence, types, and amounts of obscurations	72
G437	Measure precipitation	72
G423	Determine dew points	72
E307	Decode weather forecasts	71
G426	Determine vertical visibilities	71
G432	Estimate precipitation	71
F403	Disseminate weather observations	70
E345	Prepare automatic response to query (ARQ) requests	69
G420	Determine barometric pressures and tendencies	69
G414	Compute relative humidities	69
E358	Replace paper, ribbons, or ink on weather equipment	69
G428	Determine existence, types, amounts, and trends of distant phenomenas	67
G407	Compute altimeter settings	67
G445	Read dry or wet bulb temperatures	67
G441	Perform barometer comparisons	67
E301	Decode pilot reports (PIREPs)	65
E337	Perform pilot-to-METRO service (PMSV) contacts	65
G440	Measure heights of cloud layers	64
G416	Compute sea level pressures	64
G413	Compute pressure altitudes	64
M641	Print AWDS alphanumeric or graphics products	63
E361	Report and track weather and communications equipment outages	63
E360	Report computer malfunctions	63
G434	Inform ATCs of weather conditions	62
E326	Make entries in station logs	61
G417	Compute station pressures	61

Average number of tasks performed - 115

TABLE 15

TASKS WHICH BEST DIFFERENTIATE BETWEEN ACTIVE DUTY
DAFSC 1W031 AND 1W051 PERSONNEL (PERCENT MEMBERS PERFORMING)

TASKS		DAFSC 1W031 (N=415)	DAFSC 1W051 (N=89)	DIFFERENCE
G415	Compute runway visual ranges (RVRs)	72	46	26
G440	Measure heights of cloud layers	88	64	24
E355	Record or encode METAR codes	83	60	23
F394	Disseminate runway surface condition reports	67	44	23
G426	Determine vertical visibilities	93	71	22
G441	Perform barometer comparisons	89	67	22
G435	Inform forecasters of weather conditions	93	72	21
G429	Determine existence, types, and amounts of obscurations	93	72	21
G425	Determine precipitation types and intensities	94	73	21
G416	Compute sea level pressures	85	64	21
G417	Compute station pressures	81	61	20
G421	Determine ceiling	94	74	20
G427	Determine wind speeds, directions, and characteristics	93	73	20
G437	Measure precipitation	92	72	20
B169	Conduct OJT	26	47	-21
B176	Demonstrate use of equipment or tools	30	52	-22
B175	Demonstrate how to locate technical information	17	35	-18
A84	Evaluate unit policies, OIs, or SOPs	11	27	-16
J550	Analyze vorticity charts	7	22	-15
J544	Analyze surface charts	13	28	-15
J546	Analyze thickness charts	6	20	-14
I468	Amend weather forecasts	2	16	-14

spending much of their time performing weather observing (19 percent) and general weather (16 percent) activities. Twenty-four percent of their time is spent analyzing weather information and performing weather forecasting activities. Table 16 displays those tasks commonly performed by DAFSC 1W031A personnel.

ACTIVE DUTY DAFSC 1W051A. This group of 597 active duty airmen makes up the largest DAFSC group in the sample. As shown in Table 11, 70 percent of this group fall into the Weather Forecaster Job. Smaller percentages can be found in the 10 other jobs identified, indicating that these personnel are beginning to move into several of the more specialized jobs within the Weather career field. Table 12 shows that they perform a wide variety of duties, and spend much time performing general weather and forecasting activities. Table 17 displays those tasks typically performed by this group. Table 18 shows those tasks best distinguishing DAFSCs 1W031A and 1W051A. The 3-skill level personnel perform many more weather observing activities, while the 5-skill level personnel are beginning to perform more weather forecasting, supervision, and training tasks.

ACTIVE DUTY DAFSC 1W071A. The 555 7-skill level personnel in the A-shred make up the second largest portion of the survey sample. The largest percent fall into the Weather Forecaster Job (54 percent), but another 21 percent are in the Management/Supervisory Job (see Table 11). As seen in the 5-skill level A-shred group, small percentages of these personnel are found in 9 of the 12 more specialized jobs identified. Table 12 shows that these personnel spend almost a quarter of their time performing command, management, and staff activities. Table 19 shows the most commonly performed tasks. Many of them are supervisory and forecasting tasks. As shown in Table 20, the supervisory nature of the tasks performed by this group distinguishes them from those in DAFSC 1W051A.

ACTIVE DUTY DAFSC 1W091. Sixty-three percent of these 41 9-skill level personnel are in the Management/Supervisory Job (see Table 11). Table 12 shows that 58 percent of this group's time is spent on command, management, and staff activities. Table 21 also reveals the managerial nature of this group. Table 22 displays those tasks that best differentiate the 9-skill level from 7-skill level A-shred personnel. The 7-skill level members perform considerably more technical tasks, while 9-skill level members perform primarily managerial and supervisory tasks.

ACTIVE DUTY DAFSC 1W000. This small group of 9 chief enlisted managers (CEMs) makes up less than 1 percent of the total sample. Seventy-seven percent of their time is spent performing command, management, and staff activities (see Table 12). According to Table 11, 89 percent of this group are in the Management/Supervisory Job. Table 23 shows the managerial nature of the tasks they perform, and Table 24 displays those tasks that best distinguish this group from the 9-skill level.

AIR NATIONAL GUARD DAFSC 1W051. Sixty-five percent of these 74 airmen fall into the Weather Observer Job, while 30 percent are in the Weather Forecaster Job (see Table 11). Table 12 shows that this group performs primarily technical duties, with 34 percent of their relative time spent on weather observing tasks and another 17 percent spent on general weather activities. Table 25 lists the tasks performed by the highest percentages of 5-skill level guard personnel. As expected, most are weather observing tasks.

TABLE 16

REPRESENTATIVE TASKS PERFORMED BY ACTIVE DUTY 1W031A PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=9)
M620	Display AWDS products	100
F375	Cancel, extend, or amend local weather advisories	100
E300	Decode meteorological (METAR) observations	100
M633	Perform AWDS command sequences	100
F378	Conduct shift change briefings	100
M607	Acknowledge alerts on AWDS work stations	100
K571	Display NEXRAD products	100
E301	Decode pilot reports (PIREPs)	100
F376	Cancel, extend, or amend local weather warnings	100
F366	Brief aircrews	89
E307	Decode weather forecasts	89
M623	Edit AWDS products	89
M621	Disseminate alphanumeric weather data using AWDS	89
I480	Perform meteorological watches (METWATCHs)	89
J528	Analyze LAWCs	89
I481	Perform synoptic scale forecasting techniques	89
I468	Amend weather forecasts	89
I518	Verify weather advisories	89
E337	Perform pilot-to-METRO service (PMSV) contacts	89
F387	Disseminate local weather advisories	89
K556	Acknowledge alarms or alerts on Principle User Processors (PUPs)	89
I510	Prepare weather warnings	89
K562	Create, update, or display NEXRAD product time lapses	89
F388	Disseminate local weather warnings	89
I507	Prepare weather advisories	89
K566	Determine echo tops	89
K575	Generate one-time request products	89
E355	Record or encode METAR codes	89
E358	Replace paper, ribbons, or ink on weather equipment	89
F377	Cancel, extend, or amend local weather watches	89
M638	Perform AWDS startup or shutdown procedures for Graphics Work Stations	89
F400	Disseminate weather forecasts	78
I514	Prog surface weather features	78
J544	Analyze surface charts	78
E308	Decode weather messages	78
J537	Analyze satellite data	78
G413	Compute pressure altitudes	78
E345	Prepare automatic response to query (ARQ) requests	78
F404	Participate in meteorological discussions	78
M641	Print AWDS alphanumeric or graphics products	78
G433	Estimate heights of cloud layers	78

Average number of tasks performed - 155

TABLE 17

REPRESENTATIVE TASKS PERFORMED BY ACTIVE DUTY 1W051A PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=597)
E307	Decode weather forecasts	80
E300	Decode meteorological (METAR) observations	80
F378	Conduct shift change briefings	78
L595	Display satellite imageries	77
J537	Analyze satellite data	76
E301	Decode pilot reports (PIREPs)	76
E345	Prepare automatic response to query (ARQ) requests	76
M620	Display AWDS products	75
M607	Acknowledge alerts on AWDS work stations	75
E299	Decode forecast bulletins	75
E293	Clean weather facilities	75
J548	Analyze upper-air charts	74
E314	Encode weather forecasts	74
J544	Analyze surface charts	74
J540	Analyze Skew-T diagrams	74
I468	Amend weather forecasts	74
J528	Analyze LAWCs	73
I480	Perform meteorological watches (METWATCHs)	72
F400	Disseminate weather forecasts	72
F404	Participate in meteorological discussions	72
I519	Verify weather forecasts	72
E309	Display charts	70
I481	Perform synoptic scale forecasting techniques	69
J550	Analyze vorticity charts	69
J546	Analyze thickness charts	69
F376	Cancel, extend, or amend local weather warnings	69
F388	Disseminate local weather warnings	69
F366	Brief aircrews	68
F375	Cancel, extend, or amend local weather advisories	68
E358	Replace paper, ribbons, or ink on weather equipment	68
E308	Decode weather messages	67
E337	Perform pilot-to-METRO service (PMSV) contacts	67
M641	Print AWDS alphanumeric or graphics products	67
I510	Prepare weather warnings	67
M633	Perform AWDS command sequences	66
M648	Update AWDS products	66
I518	Verify weather advisories	66
F387	Disseminate local weather advisories	65
E310	Display local weather information	64
M647	Update AWDS product loop sequences	64
I507	Prepare weather advisories	64

Average number of tasks performed - 167

TABLE 18

TASKS WHICH BEST DIFFERENTIATE BETWEEN ACTIVE DUTY
DAFSC 1W031A AND 1W051A PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS		DAFSC 1W031A (N=9)	DAFSC 1W051A (N=597)	DIFFERENCE
K571	Display NEXRAD products	100	53	47
K585	Perform dial-up radar procedures	78	31	47
G439	Measure diameters of hailstones	78	32	46
K575	Generate one-time request products	89	47	42
K562	Create, update, or display NEXRAD product time lapses	89	48	41
K556	Acknowledge alarms or alerts on Principle User Processors (PUPs)	89	50	39
M623	Edit AWDS products	89	50	39
G416	Compute sea level pressures	78	39	39
F377	Cancel, extend, or amend local weather watches	89	53	36
K566	Determine echo tops	89	55	34
M633	Perform AWDS command sequences	100	66	34
E338	Perform power-up or power-down procedures	22	58	-36
A117	Participate in general meetings such as staff meetings, briefings, conferences, or workshops, other than conducting	0	34	-34
E302	Decode radar reports (RAREPs)	11	43	-32
F369	Brief climatological data	11	43	-32
E306	Decode ship synoptic observations	0	30	-30
M608	Assign function keys on AWDS work stations	0	30	-30
B169	Conduct OJT	22	52	-30
B175	Demonstrate how to locate technical information	0	30	-30
E319	Evaluate mission impacts of equipment outages	0	30	-30
M610	Create AWDS command sequences	11	41	-30
A38	Counsel subordinates concerning personal matters	11	40	-29
E318	Evaluate local forecast studies	0	28	-28

TABLE 19

REPRESENTATIVE TASKS PERFORMED BY ACTIVE DUTY 1W071A PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=555)
A23	Conduct briefings or presentations	73
A137	Supervise military personnel	67
A144	Write EPRs	67
E307	Decode weather forecasts	67
A38	Counsel subordinates concerning personal matters	66
E300	Decode meteorological (METAR) observations	64
E299	Decode forecast bulletins	64
A150	Write memoranda for records (MFRs)	63
E345	Prepare automatic response to query (ARQ) requests	63
L595	Display satellite imageries	62
A32	Conduct supervisory performance feedback sessions	62
J537	Analyze satellite data	62
A117	Participate in general meetings, such as staff meetings, briefings, conferences, or workshops, other than conducting	61
E332	Operate weather computer software programs	61
E293	Clean weather facilities	61
M607	Acknowledge alerts on AWDS work stations	61
J544	Analyze surface charts	60
B169	Conduct OJT	59
F404	Participate in meteorological discussions	59
M620	Display AWDS products	59
E308	Decode weather messages	59
E301	Decode pilot reports (PIREPs)	59
J548	Analyze upper-air charts	58
F378	Conduct shift change briefings	58
A80	Evaluate personnel for compliance with performance standards	57
A138	Write award or decoration nomination packages	57
J540	Analyze Skew-T diagrams	57
J550	Analyze vorticity charts	56
I475	Extract information from climatological records	56
M641	Print AWDS alphanumeric or graphics products	55
L594	Create satellite loops	54
I481	Perform synoptic scale forecasting techniques	54
A29	Conduct self-inspections or self-assessments	54
J546	Analyze thickness charts	54
I519	Verify weather forecasts	54
J528	Analyze LAWCs	54
I468	Amend weather forecasts	54
E358	Replace paper, ribbons, or ink on weather equipment	54
B176	Demonstrate use of equipment or tools	53
I480	Perform meteorological watches (METWATCHs)	53
E326	Make entries in station logs	53

Average number of tasks performed - 172

TABLE 20

TASKS WHICH BEST DIFFERENTIATE BETWEEN ACTIVE DUTY
DAFSC 1W051A AND 1W071A PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS		DAFSC 1W051A (N=597)	DAFSC 1W071A (N=555)	DIFFERENCE
E314	Encode weather forecasts	74	52	22
F366	Brief aircrews	68	46	22
F378	Conduct shift change briefings	78	58	20
F388	Disseminate local weather warnings	69	49	20
I468	Amend weather forecasts	74	54	20
F400	Disseminate weather forecasts	72	52	20
F376	Cancel, extend, or amend local weather warnings	69	50	19
E337	Perform pilot-to-METRO service (PMSV) contacts	67	48	19
F375	Cancel, extend, or amend local weather advisories	68	49	19
E316	Encode weather observations	60	41	19
F387	Disseminate local weather advisories	65	46	18
A43	Determine or establish work assignments or priorities	16	50	-34
A133	Schedule personnel for leaves, passes, or TDY	6	36	-30
A150	Write memoranda for records (MFRs)	33	63	-30
A138	Write award or decoration nomination packages	28	57	-29
A31	Conduct supervisory orientations for newly assigned personnel	17	46	-29
A52	Develop or establish work schedules	13	42	-29
A80	Evaluate personnel for compliance with performance standards	29	57	-28
A117	Participate in general meetings, such as staff meetings, briefings, conferences, or workshops, other than conducting	34	61	-27
A32	Conduct supervisory performance feedback sessions	35	62	-27
C253	Prepare duty rosters	7	33	-26
A38	Counsel subordinates concerning personal matters	40	66	-26
A137	Supervise military personnel	41	67	-26
A87	Evaluate work schedules	11	36	-25

TABLE 21

REPRESENTATIVE TASKS PERFORMED BY ACTIVE DUTY 1W091 PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=41)
A27	Conduct general meetings, such as staff meetings, briefings, conferences, or workshops	93
A117	Participate in general meetings, such as staff meetings, briefings, conferences, or workshops, other than conducting	85
A23	Conduct briefings or presentations	83
A150	Write memoranda for records (MFRs)	83
A147	Write letters of appreciation	83
A139	Write background papers, point papers, or talking papers	80
A21	Compile information for staff studies, staff summary sheets, or position papers	78
A84	Evaluate unit policies, OIs, or SOPs	78
A138	Write award or decoration nomination packages	78
A80	Evaluate personnel for compliance with performance standards	78
A24	Conduct cross-staff coordination	76
A131	Review policy letters	76
A38	Counsel subordinates concerning personal matters	76
A105	Interpret policies, directives, or procedures for subordinates	73
A58	Draft agendas for general meetings, such as staff meetings, briefings, conferences, or workshops	71
A76	Evaluate job-related suggestions	71
A137	Supervise military personnel	68
A144	Write EPRs	68
A2	Administer personnel or unit recognition or award programs	68
A81	Evaluate personnel for promotion, demotion, reclassification, or special awards	68
A31	Conduct supervisory orientations for newly assigned personnel	68
A119	Plan briefings, conferences, or workshops	66
A32	Conduct supervisory performance feedback sessions	66
A18	Assign personnel to work areas or duty positions	66
C229	Coordinate TDY orders or requests with appropriate agencies	63
A78	Evaluate manpower requirements	63
A66	Establish performance standards	63
A68	Establish unit policies, operating instructions (OIs), or standard operating procedures (SOPs)	63
A29	Conduct self-inspections or self-assessments	63
A43	Determine or establish work assignments or priorities	63
A75	Evaluate job or position descriptions	63
A5	Allocate or designate use of equipment or supplies	63
A61	Escort visiting officials	63
A148	Write letters of counseling	63
A3	Advise subordinate units on changes to regulations, manuals, or supplements	61
A67	Establish unit goals or objectives	61
A98	Indorse enlisted performance reports (EPRs)	61
A88	Evaluate workload requirements	61

Average number of tasks performed - 169

TABLE 22

TASKS WHICH BEST DIFFERENTIATE BETWEEN ACTIVE DUTY
DAFSC 1W071A AND 1W091 PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS		DAFSC 1W071A (N=555)	DAFSC 1W091 (N=41)	DIFFERENCE
B176	Demonstrate use of equipment or tools	53	17	36
J544	Analyze surface charts	60	29	31
J537	Analyze satellite data	62	32	30
I476	Extract information from weather plots	48	20	28
M646	Troubleshoot AWDS deficiencies or outages	40	12	28
J546	Analyze thickness charts	54	27	27
J550	Analyze vorticity charts	56	29	27
J548	Analyze upper-air charts	58	32	26
M638	Perform AWDS startup or shutdown procedures for Graphics Work Stations	53	27	26
F378	Conduct shift change briefings	58	32	26
M641	Print AWDS alphanumeric or graphics products	55	29	26
F400	Disseminate weather forecasts	52	27	25
A24	Conduct cross-staff coordination	22	76	-54
A21	Compile information for staff studies, staff summary sheets, or position papers	24	78	-54
A27	Conduct general meetings, such as staff meetings, briefings, conferences, or workshops	39	93	-54
A131	Review policy letters	24	76	-52
A139	Write background papers, point papers, or talking papers	29	80	-51
A58	Draft agendas for general meetings, such as staff meetings, briefings, conferences, or workshops	22	71	-49
A76	Evaluate job-related suggestions	25	71	-46
A78	Evaluate manpower requirements	18	63	-45
A147	Write letters of appreciation	40	83	-43
A63	Establish administrative files, such as correspondence files or classified files	14	56	-42
A75	Evaluate job or position descriptions	22	63	-41

TABLE 23

REPRESENTATIVE TASKS PERFORMED BY ACTIVE DUTY 1W000 PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=9)
A117	Participate in general meetings, such as staff meetings, briefings, conferences, or workshops, other than conducting	100
A3	Advise subordinate units on changes to regulations, manuals, or supplements	89
A139	Write background papers, point papers, or talking papers	89
A2	Administer personnel or unit recognition or award programs	78
A105	Interpret policies, directives, or procedures for subordinates	78
A21	Compile information for staff studies, staff summary sheets, or position papers	78
A119	Plan briefings, conferences, or workshops	78
A150	Write memoranda for records (MFRs)	67
A27	Conduct general meetings, such as staff meetings, briefings, conferences, or workshops	67
A24	Conduct cross-staff coordination	67
A58	Draft agendas for general meetings, such as staff meetings, briefings, conferences, or workshops	67
A38	Counsel subordinates concerning personal matters	67
A76	Evaluate job-related suggestions	67
A78	Evaluate manpower requirements	56
A60	Draft supplements or changes to directives, such as regulations, manuals, or indexes	56
A81	Evaluate personnel for promotion, demotion, reclassification, or special awards	56
A154	Write trip reports	56
C229	Coordinate TDY orders or requests with appropriate agencies	56
A43	Determine or establish work assignments or priorities	56
A144	Write EPRs	56
A131	Review policy letters	56
A5	Allocate or designate use of equipment or supplies	56
A137	Supervise military personnel	56
C222	Annotate security forms for facilities or security containers	56
A7	Approve or disapprove correspondence, such as letters or messages	56
A80	Evaluate personnel for compliance with performance standards	56
C262	Review publishing bulletins	56
A157	Write inputs to regulations, directives, manuals, or supplements	44
A153	Write staff studies, surveys, or routine reports, other than training or inspection reports	44
A17	Assign sponsors for newly assigned personnel	44
A133	Schedule personnel for leaves, passes, or temporary duty assignments (TDYs)	44
A16	Assign special projects to personnel for staffing actions	44
A138	Write award or decoration nomination packages	44
A69	Establish distribution procedures for documents and correspondence to subordinate units	44
A18	Assign personnel to work areas or duty positions	44
A30	Conduct staff assistance visits, inspections, or audits	33
A85	Evaluate weather and space environment support requirements	33

Average number of tasks performed - 66

TABLE 24

TASKS WHICH BEST DIFFERENTIATE BETWEEN ACTIVE DUTY
DAFSC 1W091 AND 1W000 PERSONNEL (PERCENT MEMBERS PERFORMING)

TASKS		DAFSC 1W091 (N=45)	DAFSC 1W000 (N=8)	DIFFERENCE
E297	Conduct public tours of weather facilities	58	0	58
B197	Evaluate individual training needs	56	0	56
A84	Evaluate unit policies, OIs, or SOPs	78	22	56
B200	Identify unit training requirements	54	0	54
A75	Evaluate job or position descriptions	63	11	52
A61	Escort visiting officials	63	11	52
B198	Evaluate progress of trainees	51	0	51
B172	Coordinate unit personnel training requirements with functional managers	46	0	46
A123	Plan quality control programs	46	0	46
A104	Initiate actions required due to substandard performance of personnel	56	11	45
A149	Write letters of reprimand	56	11	45
F370	Brief commanders and staff	44	0	44
A3	Advise subordinate units on changes to regulations, manuals, or supplements	61	89	-28
A60	Draft supplements or changes to directives, such as regulations, manuals, or indexes	32	56	-24

TABLE 25

REPRESENTATIVE TASKS PERFORMED BY AIR GUARD 1W051 PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=74)
G421	Determine ceiling	96
G433	Estimate heights of cloud layers	95
G422	Determine cloud types	95
G427	Determine wind speeds, directions, and characteristics	93
G423	Determine dew points	92
G430	Determine number and amount of coverage of cloud layers	91
G431	Encode surface observations	91
G425	Determine precipitation types and intensities	91
G424	Determine horizontal visibilities	89
G435	Inform forecasters of weather conditions	89
G429	Determine existence, types, and amounts of obscurations	89
G426	Determine vertical visibilities	89
G445	Read dry or wet bulb temperatures	89
G437	Measure precipitation	88
H461	Plot Skew-T diagrams	86
G407	Compute altimeter settings	84
G441	Perform barometer comparisons	84
G428	Determine existence, types, amounts, and trends of distant phenomenas	82
G413	Compute pressure altitudes	82
G432	Estimate precipitation	82
G420	Determine barometric pressures and tendencies	81
G417	Compute station pressures	78
G409	Compute density altitudes	78
G414	Compute relative humidities	76
G440	Measure heights of cloud layers	74
G412	Compute magnetic and true wind directions	72
U1008	Set up antennas at deployed locations	72
E293	Clean weather facilities	70
H454	Plot local area work charts (LAWCs)	69
G416	Compute sea level pressures	69
U977	Assemble tents	69
G436	Maintain visibility charts or photographs	69
E300	Decode meteorological (METAR) observations	66
U1009	Set up or operate field generators	66
T951	Perform self-aid and buddy care techniques	65
E355	Record or encode METAR codes	64
H455	Plot METAR codes	64
G443	Prepare visibility charts or photographs	64
G438	Measure snow depths	62
E316	Encode weather observations	61
F403	Disseminate weather observations	59
H450	Plot constant pressure charts	59

Average number of tasks performed - 111

AIR NATIONAL GUARD DAFSC 1W071A. The 59 NCOs in this group perform an average of 189 tasks. Seventy-five percent of this group fell into the Weather Forecaster Job (see Table 11), but they perform a diverse amount of duties, as seen in Table 12. Table 26 shows the top-performed tasks for this group. Table 27 shows that those with DAFSC 1W071A essentially perform many of the same tasks as those with DAFSC 1W051, but are more involved with weather forecasting and the analysis and dissemination of weather information.

AIR NATIONAL GUARD DAFSC 1W091. This small group of 14 senior NCOs perform a fairly broad job, averaging 260 tasks performed. Eighty-six percent of this group fell into the Weather Forecaster Job (see Table 11). Twenty-one percent of their time is spent performing command, management, and staff activities, as indicated in Table 12. Table 28 shows the top tasks performed by this group. Most are technical in nature. Table 29 shows that higher percentages of 9-skill level ANG personnel perform contingency, mobility, and command, management, and staff tasks, while higher percentages of 7-skill level ANG personnel are performing weather observing and forecasting activities.

Active Duty Versus Air National Guard Comparisons

Table 30 shows those tasks which best distinguish active duty personnel from those in the ANG. Data from this table clearly indicate that active duty personnel are more involved with AWDS tasks than guardsmen. Conversely, ANG personnel perform more Army support activities than their active duty counterparts.

Table 31 reflects those tasks which best distinguish between active duty 5-skill level members and those in the ANG. Similar trends found in Table 30 are also seen here.

Table 32 displays those tasks which best differentiate between active duty DAFSC 1W071A personnel and their ANG counterparts. Again, AWDS tasks are clearly more indicative of active duty personnel. However, higher percentages of ANG DAFSC 1W071A personnel are performing weather observing tasks than their active duty counterparts.

Table 33 shows those tasks which best distinguish between active duty and ANG DAFSC 1W091 personnel. Active duty 9-skill level members are clearly more involved with command, management, and staff activities, while 9-skill level ANG members are more involved with contingency and mobility functions.

Summary

Distinctions between skill-level groups are evident, with personnel at the 3-skill level spending much of their job time performing weather observing tasks. At the 5-skill level, the shift towards forecasting tasks become quite clear. At the 7-skill, 9-skill, and CEM levels, supervisory and managerial duties become more evident, although time is still spent on technical forecasting and/or observing tasks.

TABLE 26

REPRESENTATIVE TASKS PERFORMED BY AIR GUARD 1W071A PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=59)
G433	Estimate heights of cloud layers	93
E307	Decode weather forecasts	92
G422	Determine cloud types	92
G431	Encode surface observations	92
G421	Determine ceiling	92
G413	Compute pressure altitudes	92
E300	Decode meteorological (METAR) observations	90
G427	Determine wind speeds, directions, and characteristics	90
G407	Compute altimeter settings	90
E309	Display charts	88
G417	Compute station pressures	88
E301	Decode pilot reports (PIREPs)	88
E314	Encode weather forecasts	86
E316	Encode weather observations	86
G425	Determine precipitation types and intensities	86
E299	Decode forecast bulletins	86
G429	Determine existence, types, and amounts of obscurations	86
G430	Determine number and amount of coverage of cloud layers	86
G437	Measure precipitation	86
G423	Determine dew points	85
H461	Plot Skew-T diagrams	85
G445	Read dry or wet bulb temperatures	85
J528	Analyze LAWCs	83
J548	Analyze upper-air charts	83
J540	Analyze Skew-T diagrams	83
G424	Determine horizontal visibilities	83
E308	Decode weather messages	81
G426	Determine vertical visibilities	81
I510	Prepare weather warnings	81
I480	Perform meteorological watches (METWATCHs)	80
J550	Analyze vorticity charts	80
J544	Analyze surface charts	80
E355	Record or encode METAR codes	80
G432	Estimate precipitation	80
J537	Analyze satellite data	80
H454	Plot local area work charts (LAWCs)	78
J546	Analyze thickness charts	78
F378	Conduct shift change briefings	78
G412	Compute magnetic and true wind directions	78
E310	Display local weather information	78
G409	Compute density altitudes	78

Average number of tasks performed - 189

TABLE 27

TASKS WHICH BEST DIFFERENTIATE BETWEEN AIR NATIONAL GUARD
DAFSC 1W051 AND 1W071A PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS		DAFSC 1W051 (N=74)	DAFSC 1W071A (N=59)	DIFFERENCE
E314	Encode weather forecasts	24	86	-62
F376	Cancel, extend, or amend local weather warnings	19	75	-56
I510	Prepare weather warnings	30	81	-51
F375	Cancel, extend, or amend local weather advisories	24	75	-51
F366	Brief aircrews	20	69	-49
F377	Cancel, extend, or amend local weather watches	18	66	-48
J546	Analyze thickness charts	31	78	-47
I468	Amend weather forecasts	31	76	-45
I519	Verify weather forecasts	30	75	-45
J550	Analyze vorticity charts	35	80	-45
B169	Conduct OJT	30	73	-43
F388	Disseminate local weather warnings	28	71	-43
J535	Analyze radar products	14	56	-42
J548	Analyze upper-air charts	41	83	-42
E299	Decode forecast bulletins	45	86	-41

TABLE 28

REPRESENTATIVE TASKS PERFORMED BY AIR GUARD 1W091 PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=14)
A23	Conduct briefings or presentations	100
J540	Analyze Skew-T diagrams	100
T925	Encode or decode military grid reference system (MGRS) positions	100
A137	Supervise military personnel	93
T939	Obtain light data using PCs	93
J528	Analyze LAWCs	93
I480	Perform meteorological watches (METWATCHs)	93
E300	Decode meteorological (METAR) observations	93
E307	Decode weather forecasts	93
E299	Decode forecast bulletins	93
I476	Extract information from weather plots	93
J550	Analyze vorticity charts	93
I468	Amend weather forecasts	93
J544	Analyze surface charts	93
T924	Don or doff chemical warfare personal field gear	93
J548	Analyze upper-air charts	93
A84	Evaluate unit policies, OIs, or SOPs	86
E314	Encode weather forecasts	86
J537	Analyze satellite data	86
E332	Operate weather computer software programs	86
F366	Brief aircrews	86
I519	Verify weather forecasts	86
I482	Prepare aircraft operations forecasts	86
F378	Conduct shift change briefings	86
I502	Prepare short-range weather forecasts	86
E355	Record or encode METAR codes	86
I510	Prepare weather warnings	86
H461	Plot Skew-T diagrams	86
I475	Extract information from climatological records	86
T902	Conduct mobility training	86
T951	Perform self-aid and buddy care techniques	86
F375	Cancel, extend, or amend local weather advisories	86
F376	Cancel, extend, or amend local weather warnings	86
G413	Compute pressure altitudes	86
E309	Display charts	86
G433	Estimate heights of cloud layers	86
G431	Encode surface observations	86
T943	Operate TACMET equipment	86
T936	Maintain mobility deployment kits	86
I507	Prepare weather advisories	86
F388	Disseminate local weather warnings	86

Average number of tasks performed - 260

TABLE 29

TASKS WHICH BEST DIFFERENTIATE BETWEEN AIR NATIONAL GUARD
DAFSC 1W071A AND 1W091 PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS		DAFSC 1W071A (N=59)	DAFSC 1W091 (N=14)	DIFFERENCE
G445	Read dry or wet bulb temperatures	85	57	28
G434	Inform ATCs of weather conditions	31	7	24
G440	Measure heights of cloud layers	73	50	24
I501	Prepare severe nonconvective weather forecasts	36	14	22
G435	Inform forecasters of weather conditions	78	57	21
I500	Prepare severe convective weather forecasts	42	21	21
F401	Disseminate weather maps or charts on weather facsimile networks	20	0	20
T926	Establish mobility workcenters	20	79	-59
T901	Conduct mobility exercise or deployment site surveys	22	79	-57
A81	Evaluate personnel for promotion, demotion, reclassification, or special awards	24	79	-55
A4	Advise functional area personnel on the development of organizational charts, graphs, or status boards	17	71	-54
T902	Conduct mobility training	32	86	-54
A2	Administer personnel or unit recognition or award programs	19	71	-52
A154	Write trip reports	5	57	-52
A135	Select personnel for employment, promotion, or special assignment	8	57	-49
A123	Plan quality control programs	24	71	-47
T953	Plan mobility training requirements	17	64	-47
T970	Write letters of instruction (LOIs) for deploying weather personnel	10	57	-47

TABLE 30

TASKS WHICH BEST DIFFERENTIATE BETWEEN ACTIVE DUTY AND AIR NATIONAL GUARD ENLISTED PERSONNEL (PERCENT MEMBERS PERFORMING)

TASKS		ACTIVE DUTY (N=1,715)	AIR NATIONAL GUARD (N=149)	DIFFERENCE
M607	Acknowledge alerts on AWDS work stations	72	8	64
M620	Display AWDS products	65	9	56
M641	Print AWDS alphanumeric or graphics products	61	7	54
M636	Perform AWDS restart procedures	58	5	53
M633	Perform AWDS command sequences	56	4	52
M638	Perform AWDS startup or shutdown procedures for Graphics Work Stations	56	5	51
M621	Disseminate alphanumeric weather data using AWDS	56	5	51
M648	Update AWDS products	57	7	50
M647	Update AWDS product loop sequences	55	6	49
M625	Generate AWDS horizontal products	49	5	44
K556	Acknowledge alarms or alerts on Principle User Processors (PUPs)	47	4	43
U977	Assemble tents	14	70	-56
H450	Plot constant pressure charts	20	61	-41
U1007	Select sites at deployed locations	9	51	-42
H455	Plot METAR codes	24	66	-42
U1000	Perform land navigations	8	51	-43
T948	Perform camouflage procedures	15	58	-43
H461	Plot Skew-T diagrams	42	86	-44
U995	Participate in convoy operations	9	54	-45
U1009	Set up or operate field generators	13	64	-51
G409	Compute density altitudes	27	79	-52
U1008	Set up antennas at deployed locations	15	68	-53

TABLE 31

TASKS WHICH BEST DIFFERENTIATE BETWEEN
ACTIVE DUTY AND AIR NATIONAL GUARD
DAFSC 1W051 PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS		ACTIVE DUTY 1W051 (N=89)	ANG 1W051 (N=74)	DIFFERENCE
M607	Acknowledge alerts on AWDS work stations	78	5	-73
M641	Print AWDS alphanumeric or graphics products	63	4	-59
M621	Disseminate alphanumeric weather data using AWDS	60	4	-56
M648	Update AWDS products	58	4	-54
M636	Perform AWDS restart procedures	60	5	-55
M638	Perform AWDS startup or shutdown procedures for Graphics Work Stations	57	5	-52
U1008	Set up antennas at deployed locations	18	72	-54
U977	Assemble tents	17	69	-52
U1009	Set up or operate field generators	16	66	-50
G409	Compute density altitudes	37	78	-41
U995	Participate in convoy operations	10	51	-41
T948	Perform camouflage procedures	16	57	-41
T951	Perform self-aid and buddy care techniques	25	65	-40
T950	Perform field hygiene and safety activities	17	57	-40
T898	Assemble satellite antenna systems	10	50	-40
U1000	Perform land navigations	10	49	-39
U1007	Select sites at deployed locations	9	46	-37

TABLE 32

TASKS WHICH BEST DIFFERENTIATE BETWEEN
ACTIVE DUTY AND AIR NATIONAL GUARD
DAFSC 1W071A PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS		ACTIVE DUTY 1W071A (N=555)	ANG 1W071A (N=59)	DIFFERENCE
A144	Write EPRs	67	3	64
A150	Write memoranda for records (MFRs)	63	12	51
M607	Acknowledge alerts on AWDS work stations	61	12	51
M633	Perform AWDS command sequences	52	5	47
M638	Perform AWDS startup or shutdown procedures for Graphics Work Stations	53	7	46
M620	Display AWDS products	59	14	45
M636	Perform AWDS restart procedures	52	7	45
M641	Print AWDS alphanumeric or graphics products	55	12	43
M625	Generate AWDS horizontal products	53	10	43
G409	Compute density altitudes	16	78	-62
U977	Assemble tents	11	73	-62
H461	Plot Skew-T diagrams	26	85	-59
G417	Compute station pressures	31	88	-57
H450	Plot constant pressure charts	13	69	-56
G431	Encode surface observations	37	92	-55
G407	Compute altimeter settings	36	90	-54
H454	Plot local area work charts (LAWCs)	24	78	-54
G433	Estimate heights of cloud layers	40	93	-53
G445	Read dry or wet bulb temperatures	32	85	-53
U1009	Set up or operate field generators	10	63	-53
U1008	Set up antennas at deployed locations	12	64	-52

TABLE 33

TASKS WHICH BEST DIFFERENTIATE BETWEEN
ACTIVE DUTY AND AIR NATIONAL GUARD
DAFSC 1W091 PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS		ACTIVE DUTY 1W091 (N=41)	ANG 1W091 (N=14)	DIFFERENCE
A21	Compile information for staff studies, staff summary sheets, or position papers	78	14	64
A144	Write EPRs	68	7	61
A139	Write background papers, point papers, or talking papers	80	21	59
A36	Coordinate weather and space environment support concepts, policies, or requirements with appropriate agencies	59	0	59
A78	Evaluate manpower requirements	63	7	56
A149	Write letters of reprimand	56	0	56
A131	Review policy letters	76	21	55
A98	Indorse enlisted performance reports (EPRs)	61	7	54
A9	Approve or disapprove point, position, or talking papers	51	0	51
T925	Encode or decode military grid reference system (MGRS) positions	7	100	-93
T924	Don or doff chemical warfare personal field gear	7	93	-86
T910	Create tactical visibility charts	5	86	-81
T901	Conduct mobility exercise or deployment site surveys	0	79	-79
T936	Maintain mobility deployment kits	7	86	-79
T951	Perform self-aid and buddy care techniques	7	86	-79
H461	Plot Skew-T diagrams	7	86	-79
T939	Obtain light data using PCs	15	93	-78
T902	Conduct mobility training	10	86	-76
T926	Establish mobility workcenters	5	79	-74

TRAINING ANALYSIS

Occupational survey data represent one of the many sources of information which are used to assist in the development of training programs for career field personnel. OSR data useful to training personnel include job descriptions for the various jobs performed within a career field, distributions of personnel across career field jobs, percentages of personnel performing specific tasks, percentages of personnel maintaining specific equipment or systems, as well as the difficulty of tasks and TE ratings gathered from senior members of the career field.

First-Enlistment Personnel

In this study, there are 457 active duty members in their first enlistment (1-48 months TAFMS), representing 19 percent of the total survey sample. The largest percentage was DAFSC 1W0X1 personnel (N=438), while only 19 held DAFSC 1W0X1A. The jobs performed by these personnel are highly technical in nature. First enlistment personnel with DAFSC 1W0X1 spend 67 percent of their relative time performing weather observing activities, performing general weather activities, and performing AWDS activities (see Table 34). On the other hand, those with a DAFSC of 1W0X1A spend less time on general weather activities and weather observation duties (see Table 34, Duties G and E) and considerably more time on weather forecasting and analyzing weather information (see Table 34, Duties I and J). Distribution of these personnel across the career field jobs is displayed in Figure 2. This figure shows that 91 percent of those in their first enlistment fall into the Weather Observer Job. Tables 35 and 36 display the top tasks performed by active duty DAFSC 1W0X1 and 1W0X1A first-enlistment members, respectively.

One of the objectives of this survey was to gather data pertaining to various types of equipment used or maintained by AFSC 1W0X1/A members. Accordingly, Tables 37, 38, and 39 present percentages of first-enlistment active duty airmen responding to questions concerning their activities involving these items. This type of information is useful for both technical school and MAJCOM training personnel to assist them in focusing limited training time or other resources on the most utilized items. As shown in these tables, the most commonly used or operated general equipment are the Ambient Temperature/Dewpoint Measuring Set/AN-FMQ-8 and the Laser Beam Ceilometer, AN/GMQ-34. Only one item of satellite equipment was used or operated by fairly high percentages--satellite looper systems. Most commonly used or operated tactical equipment were digital handheld barometers, portable laser ceilometers, AN/GMQ-33, and weather observing kits. As for AWDS equipment used or operated, the most common items were base weather stations, alphanumerics and graphics printers, and primary observer terminals.

Training Emphasis (TE) and Task Difficulty (TD) Data

TE and TD data are secondary factors that can assist technical school personnel in deciding which tasks should be emphasized in entry-level training. These ratings, based on the judgments of senior career field NCOs working at operational units in the field, are collected to provide training personnel with a rank-ordering of those tasks in the JI considered important for first-enlistment personnel training (TE), along with a measure of the difficulty of the JI tasks (TD). The top-rated TE tasks are presented in Table 40. The top tasks rated highest in task difficulty are shown in Table 41.

TABLE 34

RELATIVE PERCENT TIME SPENT ON DUTIES BY
DAFSC 1W0X1/A ACTIVE DUTY
FIRST-ENLISTMENT PERSONNEL
(N=457)

DUTIES		PCT TIME SPENT 1W0X1 (N=438)	PCT TIME SPENT 1W0X1A (N=19)
A	PERFORMING COMMAND, MANAGEMENT, AND STAFF ACTIVITIES	3	4
B	PERFORMING TRAINING ACTIVITIES	1	2
C	PERFORMING GENERAL ADMINISTRATIVE ACTIVITIES	1	1
D	PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	1	2
E	PERFORMING GENERAL WEATHER ACTIVITIES	22	18
F	DISSEMINATING WEATHER INFORMATION	8	9
G	PERFORMING WEATHER OBSERVING ACTIVITIES	35	17
H	PLOTTING WEATHER INFORMATION	2	3
I	PERFORMING WEATHER FORECASTING ACTIVITIES	1	10
J	ANALYZING WEATHER INFORMATION	1	7
K	OBSERVING WEATHER BY RADAR	6	6
L	PERFORMING WEATHER SATELLITE ACTIVITIES	1	1
M	PERFORMING AUTOMATED WEATHER DISTRIBUTION SYSTEM (AWDS) ACTIVITIES	10	9
N	TAKING UPPER AIR OBSERVATIONS	2	4
O	PERFORMING WEATHER RECONNAISSANCE AIRCRAFT ACTIVITIES	*	*
P	PERFORMING COMPUTERIZED WEATHER ACTIVITIES	*	*
Q	PERFORMING SPACE ENVIRONMENT SUPPORT (SES) CENTRAL ACTIVITIES	1	*
R	PERFORMING SOLAR ANALYSIS ACTIVITIES	-	*
S	PERFORMING SPECIAL OPERATIONS ACTIVITIES	*	1
T	PERFORMING CONTINGENCY AND MOBILITY ACTIVITIES	4	5
U	PERFORMING ARMY SUPPORT ACTIVITIES	1	2

* Denotes less than .5 percent

AFSC 1W0X1/A
FIRST ENLISTMENT JOBS
(N=457)

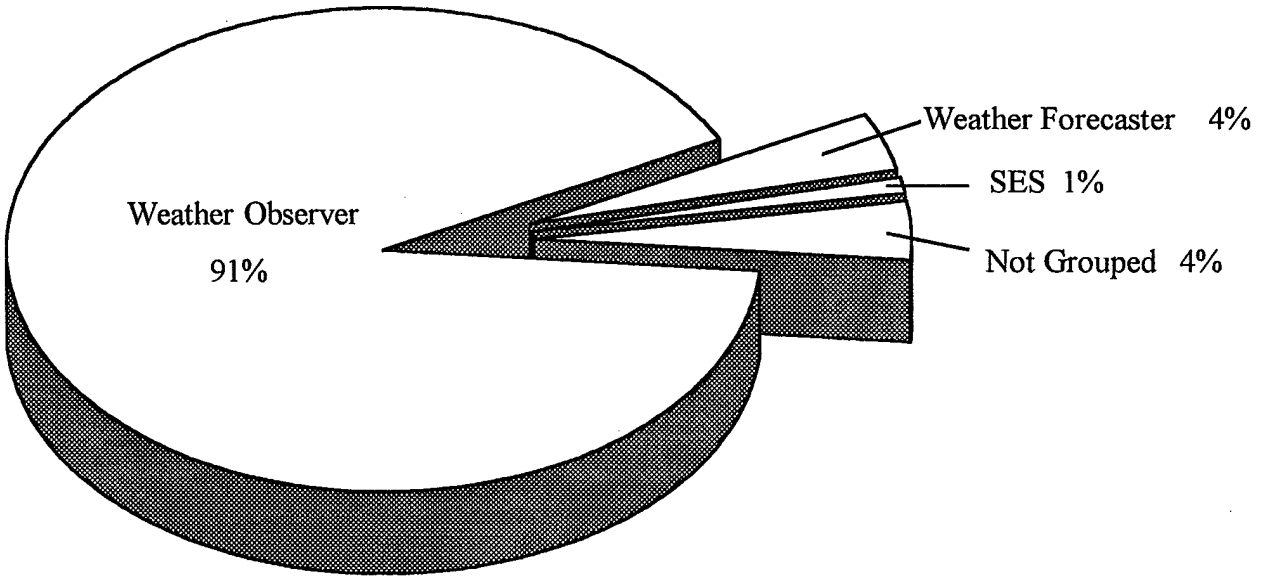

FIGURE 2

TABLE 35

REPRESENTATIVE TASKS PERFORMED BY ACTIVE DUTY 1W0X1 FIRST-ENLISTMENT PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=438)
G422	Determine cloud types	94
G431	Encode surface observations	93
G430	Determine number and amount of coverage of cloud layers	93
G435	Inform forecasters of weather conditions	93
G421	Determine ceiling	93
G433	Estimate heights of cloud layers	93
G425	Determine precipitation types and intensities	93
G424	Determine horizontal visibilities	92
G427	Determine wind speeds, directions, and characteristics	92
G429	Determine existence, types, and amounts of obscurations	92
G423	Determine dew points	91
G437	Measure precipitation	91
G426	Determine vertical visibilities	91
G441	Perform barometer comparisons	89
E316	Encode weather observations	88
G440	Measure heights of cloud layers	88
F403	Disseminate weather observations	87
G420	Determine barometric pressures and tendencies	87
E300	Decode meteorological (METAR) observations	85
E364	Verify accuracy of clocks	85
E358	Replace paper, ribbons, or ink on weather equipment	85
G428	Determine existence, types, amounts, and trends of distant phenomenas	84
G407	Compute altimeter settings	84
E293	Clean weather facilities	84
G416	Compute sea level pressures	83
M607	Acknowledge alerts on AWDS work stations	83
E355	Record or encode METAR codes	82
G432	Estimate precipitation	82
F378	Conduct shift change briefings	81
G434	Inform ATCs of weather conditions	81
G417	Compute station pressures	80
G414	Compute relative humidities	80
G445	Read dry or wet bulb temperatures	80
E337	Perform pilot-to-METRO service (PMSV) contacts	79
E307	Decode weather forecasts	77
E301	Decode pilot reports (PIREPs)	73
G413	Compute pressure altitudes	72
G415	Compute runway visual ranges (RVRs)	71
E326	Make entries in station logs	70
E345	Prepare automatic response to query (ARQ) requests	69
G412	Compute magnetic and true wind directions	68
G436	Maintain visibility charts or photographs	68

Average number of tasks performed - 110

TABLE 36

REPRESENTATIVE TASKS PERFORMED BY ACTIVE DUTY 1W0X1A FIRST-ENLISTMENT PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=19)
E300	Decode meteorological (METAR) observations	79
E355	Record or encode METAR codes	79
E307	Decode weather forecasts	74
M620	Display AWDS products	74
E310	Display local weather information	74
M607	Acknowledge alerts on AWDS work stations	74
F375	Cancel, extend, or amend local weather advisories	74
E301	Decode pilot reports (PIREPs)	74
M633	Perform AWDS command sequences	68
G421	Determine ceiling	68
G425	Determine precipitation types and intensities	68
E345	Prepare automatic response to query (ARQ) requests	68
F378	Conduct shift change briefings	68
G427	Determine wind speeds, directions, and characteristics	68
F387	Disseminate local weather advisories	68
M621	Disseminate alphanumeric weather data using AWDS	63
E299	Decode forecast bulletins	63
G433	Estimate heights of cloud layers	63
J528	Analyze LAWCs	63
M641	Print AWDS alphanumeric or graphics products	63
E316	Encode weather observations	63
G422	Determine cloud types	63
G426	Determine vertical visibilities	63
G424	Determine horizontal visibilities	63
G423	Determine dew points	63
G430	Determine number and amount of coverage of cloud layers	63
E293	Clean weather facilities	63
L595	Display satellite imageries	63
E337	Perform pilot-to-METRO service (PMSV) contacts	63
G431	Encode surface observations	63
K571	Display NEXRAD products	63
G441	Perform barometer comparisons	63
G413	Compute pressure altitudes	63
G429	Determine existence, types, and amounts of obscurations	63
F404	Participate in meteorological discussions	63
G437	Measure precipitation	63
G435	Inform forecasters of weather conditions	63
F376	Cancel, extend, or amend local weather warnings	63
G440	Measure heights of cloud layers	63
E358	Replace paper, ribbons, or ink on weather equipment	63
E356	Record or encode PIREPs	63
F366	Brief aircrews	58

Average number of tasks performed - 130

TABLE 37

GENERAL AND SATELLITE EQUIPMENT
USED OR OPERATED BY 20 PERCENT OR MORE
ACTIVE DUTY FIRST-ENLISTMENT PERSONNEL
(PERCENT MEMBERS RESPONDING)

GENERAL EQUIPMENT	DAFSC 1W0X1 (N=438)	DAFSC 1W0X1A (N=19)
Ambient Temperature and Dewpoint Measuring Sets, AN/FMQ-8	90	74
Ceilometers, Laser Beam (LBC), AN/GMQ-34	90	84
Barometers, ML-658/GM Digital Altimeter (DBASI)	82	79
Sling Psychrometers, ML-24	81	63
Barometers, ML-102 Aneroid	79	68
Pilot-to-METRO Services Radios	78	47
Precipitation Measuring Equipment	77	63
Wind Sets, AN/FMQ-11/13/20	70	53
Calculators, CP-402/UM Pressure Reduction	67	37
Radar Sets, WSR-88D	65	58
Transmissometers, AN/GMQ-10/32	61	32
Calculators, ML-429/UM Psychrometric	56	37
Lightning Detection Systems (LDSs)	53	63
Calculators, CP-164/UM Psychrometric	47	47
Backup Generators	39	42
Automatic Telephone Answering Devices	30	21
Audiovisual Equipment	26	32
Computers, Density Altitude	22	32
Computers, /Runway Visual Range (RVR), FMN-1	20	16
Interactive Video Disc Equipment	20	26
Barometers, ML-512 Aneroid	11	21
Balloons, Meteorological	11	21
Theodolites	5	21
SATELLITE EQUIPMENT		
Satellite Looper Systems	64	63

TABLE 38

TACTICAL EQUIPMENT USED OR OPERATED
BY 20 PERCENT OR MORE
ACTIVE DUTY FIRST-ENLISTMENT PERSONNEL

TACTICAL EQUIPMENT	DAFSC 1W0X1 (N=438)	DAFSC 1W0X1A (N=19)
Barometers, Digital Handheld	60	63
Ceilometers, Portable Laser, AN/GMQ-33	59	53
Weather Observing Kits	57	42
Barometers, Tactical Aneroid	53	37
Meteorological Sets, such as AN/TMQ-34	53	47
Manual Observing Systems (MOSs)	50	53
Belt Weather Kits	46	47
Anemometers, Sims	43	37
Global Positioning Systems (GPSs)	39	42
Wind Sets, Portable	32	47
Goldwings	32	42
Generators	28	42
Alden Minifaxes, 9315R, T/R, TRT	26	32
Small Arms, such as .38 and 9mm caliber pistols and M-16 rifles	25	32
Compasses, Brunton	24	26
Weather Equipment Kits	24	26
Chemical Defense Equipment	22	21
Temperature Humidity Measuring Sets, AN/TMQ-11	22	26
Tents	21	21
Compasses, Lensatic	18	32
Equipment, TA-50	18	32
Vehicles, Tactical	18	26
Binoculars, Range Finding	16	21
Camouflage Screening	16	26
SWO Kit, other than electronic	16	21
Antennas, General, such as OE 254	15	32
Helium Cylinders, Small Tactical	2	21
Theodolites, PMQ-10 Tactical	2	21

TABLE 39

AUTOMATED WEATHER DISTRIBUTION SYSTEM (AWDS) EQUIPMENT
USED OR OPERATED BY 20 PERCENT OR MORE
ACTIVE DUTY FIRST-ENLISTMENT PERSONNEL
(PERCENT MEMBERS RESPONDING)

AUTOMATED WEATHER DISTRIBUTION SYSTEM (AWDS)	DAFSC 1W0X1 (N=438)	DAFSC 1W0X1A (N=19)
Base Weather Stations (BWSs)	75	63
Printers, Alphanumerics	74	68
Primary Observer Terminals (POBSs)	67	32
Printers, Graphics	64	68
Aircrew Briefing Terminals (ABTs)	59	58
Staff/Wing Weather Officer (SWO/WWO) Terminals	29	32

TABLE 40

ACTIVE DUTY 1W0X1 TASKS RATED HIGHEST IN TRAINING EMPHASIS (TE)

TASKS		TNG EMP*	PERCENT MEMBERS PERFORMING 1ST JOB (N=252)	PERCENT MEMBERS PERFORMING 1ST ENL (N=438)	TASK DIFF**
E316	Encode weather observations	7.96	89	88	4.28
G431	Encode surface observations	7.88	93	93	4.65
G433	Estimate heights of cloud layers	7.86	92	93	5.09
G440	Measure heights of cloud layers	7.71	88	88	3.95
G421	Determine ceiling	7.71	94	93	4.47
G430	Determine number and amount of coverage of cloud layers	7.62	94	93	4.66
G424	Determine horizontal visibilities	7.61	92	92	4.54
E300	Decode meteorological (METAR) observations	7.59	84	85	3.64
G422	Determine cloud types	7.57	94	94	4.70
G429	Determine existence, types, and amounts of obscurations	7.55	93	92	4.49
G427	Determine wind speeds, directions, and characteristics	7.46	93	92	4.06
E301	Decode pilot reports (PIREPs)	7.45	73	73	3.54
G425	Determine precipitation types and intensities	7.43	94	93	4.37
G426	Determine vertical visibilities	7.41	92	91	4.84
E307	Decode weather forecasts	7.34	75	77	3.81
E337	Perform pilot-to-METRO service (PMSV) contacts	7.32	79	79	4.16
F403	Disseminate weather observations	7.30	88	87	3.48
G415	Compute runway visual ranges (RVRs)	7.25	68	71	3.81
G417	Compute station pressures	7.25	77	80	3.80
G413	Compute pressure altitudes	7.23	69	72	3.72
G412	Compute magnetic and true wind directions	7.20	65	68	2.99
G416	Compute sea level pressures	7.20	81	83	4.09
G423	Determine dew points	7.16	90	91	3.59
G435	Inform forecasters of weather conditions	7.11	93	93	3.31
G438	Measure snow depths	7.04	63	65	3.66

* Mean TE Rating is 1.97, and Standard Deviation is 2.05 (High TE = 4.02)

** Average TD Rating is 5.00

TABLE 41

ACTIVE DUTY 1W0X1/A TASKS RATED HIGHEST IN TASK DIFFICULTY (TD)

TASKS		TASK DIFF*	ACTIVE DUTY PERCENT MEMBERS PERFORMING DAFSC 1W031 (N=415)	DAFSC 1W051 (N=89	DAFSC 1W031A (N=555)	DAFSC 1W051A (N=41)	DAFSC 1W071A (N=9)	TNG EMP**
P737	Write computer software codes	7.83	1	1	0	2	3	.04
P703	Develop computer software	7.77	1	2	0	2	4	.00
P736	Write computer runstreams	7.45	0	1	0	1	2	.04
R842	Perform burst patrols in manual mode	7.43	0	0	0	1	2	.11
S890	Set up airborne operations	7.31	0	0	0	2	1	.45
M613	Create local algorithms for AWDS, such as for severe weather	7.29	1	4	0	11	9	1.77
P704	Develop data bases	7.27	2	4	0	6	6	.00
A145	Write host-tenant, host-nation, interagency, or interservice agreements, such as MOUs	7.17	0	0	0	1	6	.11
S884	Perform small boat operations	7.14	0	0	0	0	1	.52
T917	Develop communication and contingency OPLANs	7.07	0	0	0	3	3	.54
S889	Plan special operations weather team missions	7.07	0	0	0	2	2	.16
I492	Prepare forecast studies	6.97	0	2	11	29	29	1.82
K583	Perform Unit Control Position (UCP) functions	6.95	20	8	56	22	13	3.30
I500	Prepare severe convective weather forecasts	6.94	1	8	56	31	23	2.62
R845	Perform flare patrols in semiautomatic mode	6.89	0	0	0	2	2	.11
K568	Determine severe weather signatures	6.88	31	35	78	51	37	6.25
P731	Specify weather input-output formats	6.88	0	0	0	1	2	.20
S883	Perform scout swimmer operations	6.84	0	0	0	1	1	.21
Q742	Operate alternate Space Environment Support (SES) sites	6.82	0	0	0	1	1	.11
A10	Approve or disapprove responses to congressional inquiries	6.81	1	2	0	2	2	.00
U990	Evaluate effectiveness of new Army support weather technologies	6.81	1	6	0	4	4	.79

* Average TD Rating is 5.00

** Mean TE Rating is 1.97, and Standard Deviation is 2.05 (High TE = 4.02)

When combined with data on the percentages of first-enlistment personnel performing tasks, comparisons can then be made to determine if training adjustments are necessary. For example, tasks receiving high ratings on both task factors, accompanied by moderate to high percentages performing, may warrant resident training. Those tasks receiving high task factor ratings, but low percentages performing, may be more appropriately planned for OJT programs within the career field. Low task factor ratings may highlight tasks best omitted from training for first-enlistment personnel, but this decision must be weighed against percentages of personnel performing the tasks, command concerns, and criticality of the tasks.

The results of the TE and TD analysis reveal certain trends. The tasks rated highest in TE (Table 40) pertain to performing weather observing activities. A few tasks related to performing general weather activities are also apparent in the high TE range. All of the highest tasks were performed by high percentages of first-enlistment personnel. Of those tasks rated highest in task difficulty (Table 41), many were focused on computerized weather activities and managerial and planning-type tasks. The percent members performing these tasks is fairly low for most of the tasks. In addition, the majority of these tasks were also rated low in training emphasis.

To assist technical school personnel, AFOMS has developed a computer program that incorporates these secondary factors and the percentage of first-enlistment personnel performing each task to produce an Automated Training Indicator (ATI) for each task. These indicators correspond to training decisions listed and defined in the Training Decision Logic Table found in Attachment 2, AETC Instruction 36-2601, and allow course personnel to quickly focus their attention on those tasks which are most likely to qualify for initial resident course consideration.

Various lists of tasks, accompanied by TE and TD ratings, and where appropriate, ATI information, are contained in the TRAINING EXTRACT package and should be reviewed in detail by training personnel. (For a more detailed explanation of TE and TD ratings, see Task Factor Administration in the **SURVEY METHODOLOGY** section of this report.).

ANALYSIS OF MAJOR COMMANDS (MAJCOM)

Tasks and background data of the MAJCOMs or field operating agencies with the largest AFSC 1W0X1/A populations were compared to determine whether job content varied as a function of command assignment (see Tables 42 and 43). Generally, all MAJCOMs showed high relative time spent in performing general weather activities, performing weather observing tasks, and performing AWDS activities. Overall, there were no major differences between MAJCOM groups, although several small differences were noted. For instance, AWS personnel reported spending a higher percent of their time performing command, management, and staff activities. Personnel assigned to AFSPC were the only ones performing space environment support and solar analysis activities. AFSOC members with an AFSC of 1W0X1A were more involved with contingency and mobility activities. AETC personnel with AFSC 1W0X1A were more involved with training activities. ANG members reflected similar time spent on duties as their active duty counterparts, although they did spend much more time performing contingency and mobility activities.

TABLE 42

PERCENTAGE OF TIME SPENT ON DUTIES BY 1W0X1 MAJCOM GROUPS

	DUTIES	USAFE (N=63)	AETC (N=64)	PACAF (N=65)	ACC (N=204)	AMC (N=44)	AFMC (N=56)	AFSPC (N=24)	AWS (N=22)	ANG (N=88)
A	PERFORMING COMMAND, MANAGEMENT, AND STAFF ACTIVITIES	6	5	7	6	9	6	11	39	7
B	PERFORMING TRAINING ACTIVITIES	3	2	2	2	2	2	4	8	4
C	PERFORMING GENERAL ADMINISTRATIVE ACTIVITIES	2	1	1	1	1	2	3	9	1
D	PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	1	1	1	2	1	2	1	1	2
E	PERFORMING GENERAL WEATHER ACTIVITIES	22	22	23	20	21	23	15	14	16
F	DISSEMINATING WEATHER INFORMATION	7	8	8	7	7	7	3	3	4
G	PERFORMING WEATHER OBSERVING ACTIVITIES	34	28	30	33	35	31	24	9	30
H	PLOTTING WEATHER INFORMATION	2	3	3	2	2	2	1	1	4
I	PERFORMING WEATHER FORECASTING ACTIVITIES	2	2	2	2	2	1	1	1	6
J	ANALYZING WEATHER INFORMATION	1	5	1	1	1	1	1	2	6
K	OBSERVING WEATHER BY RADAR	3	8	6	6	5	5	1	1	*
L	PERFORMING WEATHER SATELLITE ACTIVITIES	1	1	1	1	*	1	*	*	1
M	PERFORMING AUTOMATED WEATHER DISTRIBUTION SYSTEM (AWDS) ACTIVITIES	8	12	9	9	10	10	6	5	*
N	TAKING UPPER AIR OBSERVATIONS	1	*	1	1	*	5	8	*	-
O	PERFORMING WEATHER RECONNAISSANCE AIRCRAFT ACTIVITIES	*	*	*	*	-	*	-	-	*
P	PERFORMING COMPUTERIZED WEATHER ACTIVITIES	*	*	1	*	*	*	*	6	1
Q	PERFORMING SPACE ENVIRONMENT SUPPORT (SES) CENTRAL ACTIVITIES	-	-	-	*	-	*	19	-	-
R	PERFORMING SOLAR ANALYSIS ACTIVITIES	*	-	-	-	-	-	1	-	-
S	PERFORMING SPECIAL OPERATIONS ACTIVITIES	-	-	*	*	-	-	-	-	*
T	PERFORMING CONTINGENCY AND MOBILITY ACTIVITIES	4	1	4	5	3	2	1	1	12
U	PERFORMING ARMY SUPPORT ACTIVITIES	3	*	2	2	*	*	-	*	5

* Denotes less than .5 percent

TABLE 43

PERCENTAGE OF TIME SPENT ON DUTIES BY 1W0X1A MAJCOM GROUPS

	DUTIES	USAFE (N=138)	AETC (N=127)	PACAF (N=144)	AFSOC (N=44)	ACC (N=271)	AMC (N=74)	AFMC (N=62)	AFSPC (N=67)	AWS (N=219)	ANG (N=61)
A	PERFORMING COMMAND, MANAGEMENT, AND STAFF ACTIVITIES	12	16	11	16	13	11	9	17	24	10
B	PERFORMING TRAINING ACTIVITIES	5	16	5	5	5	4	4	6	7	7
C	PERFORMING GENERAL ADMINISTRATIVE ACTIVITIES	2	2	2	3	2	2	1	3	6	2
D	PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	2	3	2	4	2	1	1	2	2	2
E	PERFORMING GENERAL WEATHER ACTIVITIES	17	12	16	12	15	18	16	10	13	15
F	DISSEMINATING WEATHER INFORMATION	8	6	9	5	8	10	10	5	3	7
G	PERFORMING WEATHER OBSERVING ACTIVITIES	9	9	6	7	8	6	8	2	1	19
H	PLOTTING WEATHER INFORMATION	1	1	1	1	1	1	1	1	1	3
I	PERFORMING WEATHER FORECASTING ACTIVITIES	13	7	12	8	11	12	13	7	9	10
J	ANALYZING WEATHER INFORMATION	10	7	9	7	9	10	12	6	11	9
K	OBSERVING WEATHER BY RADAR	2	7	5	2	7	7	8	4	1	*
L	PERFORMING WEATHER SATELLITE ACTIVITIES	2	2	4	2	2	2	2	1	7	1
M	PERFORMING AUTOMATED WEATHER DISTRIBUTION SYSTEM (AWDS) ACTIVITIES	11	8	11	4	9	11	11	5	5	1
N	TAKING UPPER AIR OBSERVATIONS	*	*	*	3	*	*	*	*	*	*
O	PERFORMING WEATHER RECONNAISSANCE AIRCRAFT ACTIVITIES	-	*	*	*	*	-	*	-	*	-
P	PERFORMING COMPUTERIZED WEATHER ACTIVITIES	*	*	1	1	*	*	*	1	9	*
Q	PERFORMING SPACE ENVIRONMENT SUPPORT (SES) CENTRAL ACTIVITIES	-	-	-	*	-	-	-	9	*	-
R	PERFORMING SOLAR ANALYSIS ACTIVITIES	-	-	*	*	*	-	*	20	*	-
S	PERFORMING SPECIAL OPERATIONS ACTIVITIES	-	-	*	2	*	-	*	-	-	*
T	PERFORMING CONTINGENCY AND MOBILITY ACTIVITIES	5	3	5	13	5	5	4	1	1	10
U	PERFORMING ARMY SUPPORT ACTIVITIES	2	1	1	5	1	*	*	-	*	5

* Denotes less than .5 percent

JOB SATISFACTION ANALYSIS

As mentioned earlier, an examination of the job satisfaction indicators of various groups can give career field managers a better understanding of some of the factors which may affect the job performance of airmen in the career field. Questions covering job interest, perceived utilization of talents and training, sense of accomplishment, and reenlistment intent were included in the survey booklet to provide indications of job satisfaction. Tables 44 through 48 present job satisfaction data for various active duty groups within the Weather career field.

Table 44 presents data for active duty AFSC 1W0X1/A TAFMS groups, together with TAFMS data for a comparative sample of Direct Support career ladders surveyed in 1996. As reflected in this table, job satisfaction for Weather personnel were good across all three TAFMS groups and were generally higher than seen in the comparative sample. Perceived utilization of training showed the highest satisfaction ratings across the board, with more than 80 percent of Weather personnel indicating their training was being well utilized in their jobs. The major problem area of concern to career field managers is the lower than expected reenlistment intentions of first- and second-term airmen. These figures could indicate retention problems in the coming years.

Tables 45 and 46 present data for active duty AFSC 1W0X1 and 1W0X1A personnel, respectively. Similar trends to those seen in Table 44 were noted. There were, however, a few areas of concern. First enlistment AFSC 1W0X1A personnel reflected a very low sense of accomplishment gained from their work and only 21 percent planned to reenlist (see Table 46). In addition, AFSCC 1W0X1 personnel in their second enlistment also reflected fairly low sense of accomplishment gained from their work (only 44 percent were satisfied, see Table 45).

An indication of how job satisfaction perceptions have changed over time is provided in Table 47, where TAFMS data for 1997 survey respondents are presented, along with data from respondents to the 1992 survey. In general, job satisfaction has remained fairly constant over the last 5 years. However, reenlistment intentions are much lower today than they were in 1992.

Table 48 compares job satisfaction data for enlisted active duty and ANG personnel. In all categories shown, ANG personnel reflected higher satisfaction than their active duty counterparts.

TABLE 44

COMPARISON OF JOB SATISFACTION INDICATORS FOR ACTIVE DUTY 1W0X1/A PERSONNEL
(PERCENT MEMBERS RESPONDING)

	1-48 MONTHS		49-96 MONTHS		97+ MONTHS	
	1997 1W0X1/A (N=457)	COMP SAMPLE* (N=1,606)	1997 1W0X1/A (N=285)	COMP SAMPLE* (N=1,024)	1997 1W0X1/A (N=973)	COMP SAMPLE* (N=2,244)
EXPRESSED JOB INTEREST:						
INTERESTING	62	57	70	60	78	73
SO-SO	19	24	13	22	12	17
DULL	19	19	17	18	10	11
PERCEIVED UTILIZATION OF TALENTS:						
FAIRLY WELL TO PERFECTLY	71	67	77	68	85	79
NOT AT ALL OR VERY LITTLE	29	33	23	32	15	21
PERCEIVED UTILIZATION OF TRAINING:						
FAIRLY WELL TO PERFECTLY	91	80	88	77	81	77
NOT AT ALL OR VERY LITTLE	9	20	12	23	19	23
SENSE OF ACCOMPLISHMENT GAINED FROM WORK:						
SATISFIED	56	61	62	62	66	71
NEUTRAL	16	19	11	16	9	11
DISSATISFIED	28	20	27	22	25	18
REENLISTMENT INTENTIONS:						
YES OR PROBABLY YES	42	59	53	74	64	75
NO OR PROBABLY NO	58	41	46	26	13	8
WILL RETIRE	0	0	0	0	22	16

* Comparative sample of direct support career ladders surveyed in 1996 (includes AFSCs 2T0X1, Traffic Management; 2T2X1, Air Transportation; 3C1X1, Radio Communications Systems; and 3E1X1, Heating, Ventilation, Air Conditioning, and Refrigeration)

TABLE 45

COMPARISON OF JOB SATISFACTION INDICATORS FOR ACTIVE DUTY 1W0X1 PERSONNEL
(PERCENT MEMBERS RESPONDING)

	1-48 MONTHS		49-96 MONTHS		97+ MONTHS	
	1997 1W0X1 (N=438)	COMP SAMPLE* (N=1,606)	1997 1W0X1 (N=59)	COMP SAMPLE* (N=1,024)	1997 1W0X1 (N=57)	COMP SAMPLE* (N=2,244)
EXPRESSED JOB INTEREST:						
INTERESTING	62	57	47	60	82	72
SO-SO	19	24	24	22	5	17
DULL	19	19	29	18	12	11
PERCEIVED UTILIZATION OF TALENTS:						
FAIRLY WELL TO PERFECTLY	70	67	63	68	91	79
NOT AT ALL OR VERY LITTLE	30	33	37	32	9	21
PERCEIVED UTILIZATION OF TRAINING:						
FAIRLY WELL TO PERFECTLY	91	80	85	77	84	77
NOT AT ALL OR VERY LITTLE	9	20	15	23	16	23
SENSE OF ACCOMPLISHMENT GAINED FROM WORK:						
SATISFIED	57	61	44	62	67	71
NEUTRAL	16	19	22	16	5	11
DISSATISFIED	27	20	34	22	28	18
REENLISTMENT INTENTIONS:						
YES OR PROBABLY YES	42	59	46	74	35	75
NO OR PROBABLY NO	57	41	54	26	21	8
WILL RETIRE	0	0	0	0	42	16

* Comparative sample of direct support career ladders surveyed in 1996 (includes AFSCs 2T0X1, Traffic Management; 2T2X1, Air Transportation; 3C1X1, Radio Communications Systems; and 3E1X1, Heating, Ventilation, Air Conditioning, and Refrigeration)

TABLE 46

COMPARISON OF JOB SATISFACTION INDICATORS FOR ACTIVE DUTY 1W0X1A PERSONNEL
(PERCENT MEMBERS RESPONDING)

	1-48 MONTHS		49-96 MONTHS		97+ MONTHS	
	1997 1W0X1A (N=19)	COMP SAMPLE* (N=1,606)	1997 1W0X1A (N=226)	COMP SAMPLE* (N=1,024)	1997 1W0X1A (N=916)	COMP SAMPLE* (N=2,244)
EXPRESSED JOB INTEREST:						
INTERESTING	68	57	76	60	78	72
SO-SO	16	24	10	22	12	17
DULL	16	19	14	18	10	11
PERCEIVED UTILIZATION OF TALENTS:						
FAIRLY WELL TO PERFECTLY	84	67	81	68	85	79
NOT AT ALL OR VERY LITTLE	16	33	19	32	15	21
PERCEIVED UTILIZATION OF TRAINING:						
FAIRLY WELL TO PERFECTLY	100	80	89	77	80	77
NOT AT ALL OR VERY LITTLE	0	20	11	23	20	23
SENSE OF ACCOMPLISHMENT GAINED FROM WORK:						
SATISFIED	32	61	67	62	66	71
NEUTRAL	26	19	8	16	9	11
DISSATISFIED	42	20	25	22	25	18
REENLISTMENT INTENTIONS:						
YES OR PROBABLY YES	21	59	55	74	66	75
NO OR PROBABLY NO	79	41	44	26	12	8
WILL RETIRE	0	0	0	0	21	16

* Comparative sample of direct support career ladders surveyed in 1996 (includes AFSCs 2T0X1, Traffic Management; 2T2X1, Air Transportation; 3C1X1, Radio Communications Systems; and 3E1X1, Heating, Ventilation, Air Conditioning, and Refrigeration)

TABLE 47

COMPARISON OF JOB SATISFACTION INDICATORS FOR ACTIVE DUTY 1W0X1/A PERSONNEL
FOR CURRENT AND PREVIOUS STUDY
(PERCENT MEMBERS RESPONDING)

	1-48 MONTHS		49-96 MONTHS		97+ MONTHS	
	1997 1W0X1/A (N=457)	1992 SURVEY (N=523)	1997 1W0X1/A (N=285)	1992 SURVEY (N=278)	1997 1W0X1/A (N=973)	1992 SURVEY (N=803)
EXPRESSED JOB INTEREST:						
INTERESTING	62	64	70	73	78	79
SO-SO	19	18	13	14	12	12
DULL	19	18	17	13	10	9
PERCEIVED UTILIZATION OF TALENTS:						
FAIRLY WELL TO PERFECTLY	71	68	77	80	85	85
NOT AT ALL OR VERY LITTLE	29	32	23	20	15	15
PERCEIVED UTILIZATION OF TRAINING:						
FAIRLY WELL TO PERFECTLY	91	86	88	86	80	82
NOT AT ALL OR VERY LITTLE	9	14	12	14	19	18
REENLISTMENT INTENTIONS:						
YES OR PROBABLY YES	42	49	53	63	64	74
NO OR PROBABLY NO	58	49	46	37	13	9
WILL RETIRE	0	0	0	0	22	17

TABLE 48

COMPARISONS OF JOB SATISFACTION INDICATORS BY COMPONENT STATUS
(PERCENT MEMBERS RESPONDING)

	ENLISTED ACTIVE DUTY (N=1,715)	ENLISTED ANG (N=149)
EXPRESSED JOB INTEREST:		
INTERESTING	72	81
SO-SO	14	11
DULL	14	8
PERCEIVED UTILIZATION OF TALENTS:		
FAIRLY GOOD TO PERFECT	80	91
LITTLE OR NOT AT ALL	20	9
PERCEIVED UTILIZATION OF TRAINING:		
FAIRLY GOOD TO PERFECT	85	93
LITTLE OR NOT AT ALL	15	7
SENSE OF ACCOMPLISHMENT GAINED FROM WORK:		
SATISFIED	63	70
NEUTRAL	11	13
DISSATISFIED	26	17

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AFSC 15WX/A
ANALYSES

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AFSC 15WX/A

ANALYSIS OF DAFSC GROUPS

Table 49 displays the distribution of Weather Officer DAFSC groups across career field jobs. Table 50 displays the relative time spent on each duty across the various DAFSC 15WX/A officer groups. Once again, a typical pattern of progression can be seen, with officers spending more of their relative time on duties involving supervisory, managerial, and training tasks as they move upward toward the fully-qualified and staff levels. Active duty officers in staff level positions spend much more time performing command, management, and staff activities than their ANG counterparts.

DAFSC Descriptions

ACTIVE DUTY DAFSC 15W1. The 43 active duty officers in this entry-level group perform an average of 155 tasks. Seventy-seven percent of these officers fall into the Weather Forecaster Job (see Table 49). Another 12 percent were in the Global Weather Central Job. Seventy-four percent of their relative job time is spent in six duty areas. As shown in Table 50, general weather activities consume the largest amount of time (16 percent), but weather forecasting, analyzing weather information, and AWDS activities consume 37 percent of their time. Only 11 percent of their time is spent performing command, management, and staff activities. Table 51 displays the commonly performed tasks for these officers. Most are technical in nature.

ACTIVE DUTY DAFSC 15W3. This group of 205 fully-qualified active duty officers make up 45 percent of the total active duty officers in the survey sample. As shown in Table 49, almost half are working in the Weather Forecaster Job, but 38 percent are found in the Management/Supervisory Job. This increase in management and supervisory responsibilities is also reflected in time spent on duties (see Table 50). As shown, 39 percent of their time is spent performing command, management, and staff activities (as compared to only 11 percent for 15WX officers). Time spent on technical weather duties, such as weather forecasting, analyzing weather information, disseminating weather information, and AWDS activities drops off from that reflected by 15W1 officers. Table 52 displays their most-performed tasks. While some technical tasks are listed, the majority are managerial in nature. Table 53 displays those tasks that best distinguish this group from active duty 15W1 personnel. As expected, DAFSC 15W3 personnel perform more managerial activities, while 15W1 personnel perform a more technical role.

ACTIVE DUTY DAFSC 15W4. These 88 officers perform an average of 80 tasks. They perform a very focused supervisory and managerial role. Table 49 shows that 90 percent are in the Management/ Supervisory Job, while Table 50 shows that 71 percent of their time is spent on command, management, and staff activities. Table 54 also displays the focused nature of these higher-level tasks. Table 55 reflects those tasks which best distinguish these officers from 15W3 officers. As expected, 15W3 personnel perform more general weather activities than this group.

ACTIVE DUTY DAFSC 15W1A. This group of 17 officers performs an average of 74 tasks. Forty-one percent work in the Management/Supervisory Job and 29 percent work in the Computer Programmer Job (see Table 50). Table 50 shows that 25 percent of this group's time is spent on computerized weather

TABLE 49

DISTRIBUTION OF DAFSC 15WX/A GROUP MEMBERS ACROSS SPECIALTY JOBS
(PERCENT RESPONDING)

SPECIALTY JOBS	ACTIVE DUTY					AIR NATIONAL GUARD			AFRES
	DAFSC 15W1 (N=43)	DAFSC 15W3 (N=205)	DAFSC 15W4 (N=88)	DAFSC 15W1A (N=17)	DAFSC 15W3A (N=104)	DAFSC 15W1 (N=5)	DAFSC 15W3 (N=31)	DAFSC 15W4 (N=5)	DAFSC 15W3 (N=15)
I. WEATHER FORECASTER	77	49	7	6	7	100	87	40	-
II. WEATHER OBSERVER	2	-	-	-	-	-	-	-	-
III. MGMT/SUPERVISORY	5	38	90	41	67	-	6	20	-
IV. GLOBAL WEATHER	12	-	-	6	1	-	-	-	-
V. SATELLITE ANALYSIS	-	-	-	6	-	-	-	-	-
VI. PROGRAMMER	-	1	-	29	4	-	-	-	-
VII. CONTINGENCY/MOBILITY		5	-	-	-	-	3	-	
VIII. SES	-	-	-	-	6	-	-	-	-
IX SOLAR ANALYST	-	-	-	-	-	-	-	-	-
X. AERIAL RECON	-	-	-	-	-	-	-	-	100
XI. TRAINING	-	-	-	6	2	-	-	-	-
XII. AWDS	-	1	-	-	-	-	-	-	-
NOT GROUPED	4	6	3	6	13	-	4	40	-

- Denotes no members

TABLE 50

RELATIVE PERCENT TIME SPENT ON DUTIES BY DAFSC 15WX/A GROUPS

DUTIES	ACTIVE DUTY					AIR NATIONAL GUARD			AFRES
	DAFSC 15W1 (N=43)	DAFSC 15W3 (N=205)	DAFSC 15W4 (N=88)	DAFSC 15W1A (N=17)	DAFSC 15W3A (N=104)	DAFSC 15W1 (N=5)	DAFSC 15W3 (N=31)	DAFSC 15W4 (N=5)	DAFSC 15W3 (N=15)
A PERFORMING COMMAND, MANAGEMENT, AND STAFF ACTIVITIES	11	39	71	33	53	20	26	41	10
B PERFORMING TRAINING ACTIVITIES	2	5	3	12	7	5	7	6	5
C PERFORMING GENERAL ADMINISTRATIVE ACTIVITIES	3	4	6	3	6	2	2	*	1
D PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	1	1	*	1	1	*	*	-	*
E PERFORMING GENERAL WEATHER ACTIVITIES	16	10	5	6	6	8	10	7	11
F DISSEMINATING WEATHER INFORMATION	10	5	2	2	2	8	7	3	3
G PERFORMING WEATHER OBSERVING ACTIVITIES	5	1	*	*	*	7	4	3	9
H PLOTTING WEATHER INFORMATION	1	*	*	*	*	2	1	*	1
I PERFORMING WEATHER FORECASTING ACTIVITIES	12	6	1	2	2	12	11	9	2
J ANALYZING WEATHER INFORMATION	13	6	2	6	5	8	9	7	6
K OBSERVING WEATHER BY RADAR	7	3	*	1	1	*	*	-	2
L PERFORMING WEATHER SATELLITE ACTIVITIES	3	2	*	4	2	1	*	*	*
M PERFORMING AUTOMATED WEATHER DISTRIBUTION SYSTEM (AWDS) ACTIVITIES	12	5	2	1	*	-	*	-	4
N TAKING UPPER AIR OBSERVATIONS	*	*	-	*	*	*	-	-	-
O PERFORMING WEATHER RECONNAISSANCE AIRCRAFT ACTIVITIES	*	-	-	-	*	-	-	-	41
P PERFORMING COMPUTERIZED WEATHER ACTIVITIES	*	2	*	25	8	*	*	-	1
Q PERFORMING SPACE ENVIRONMENT SUPPORT (SES) CENTRAL ACTIVITIES	*	*	*	-	3	-	-	-	-
R PERFORMING SOLAR ANALYSIS ACTIVITIES	-	*	-	-	*	-	*	-	-
S PERFORMING SPECIAL OPERATIONS ACTIVITIES	*	*	*	-	*	-	*	*	-
T PERFORMING CONTINGENCY AND MOBILITY ACTIVITIES	3	9	3	*	1	17	15	14	*
U PERFORMING ARMY SUPPORT ACTIVITIES	*	1	*	-	*	8	5	8	-

* Denotes less than .5 percent

\- Denotes no members performing

TABLE 51

REPRESENTATIVE TASKS PERFORMED BY ACTIVE DUTY 15W1 OFFICERS

TASKS		PERCENT MEMBERS PERFORMING (N=43)
A23	Conduct briefings or presentations	93
M607	Acknowledge alerts on AWDS work stations	91
M620	Display AWDS products	86
F366	Brief aircrews	86
E314	Encode weather forecasts	86
F378	Conduct shift change briefings	86
J544	Analyze surface charts	83
L595	Display satellite imageries	83
F400	Disseminate weather forecasts	81
M648	Update AWDS products	81
E345	Prepare automatic response to query (ARQ) requests	81
M633	Perform AWDS command sequences	79
F404	Participate in meteorological discussions	79
J540	Analyze Skew-T diagrams	79
E300	Decode meteorological (METAR) observations	79
J548	Analyze upper-air charts	77
E307	Decode weather forecasts	77
I479	Perform mesoscale forecasting techniques	77
J528	Analyze LAWCs	77
M641	Print AWDS alphanumeric or graphics products	77
E337	Perform pilot-to-METRO service (PMSV) contacts	77
I510	Prepare weather warnings	77
F388	Disseminate local weather warnings	77
J537	Analyze satellite data	74
M647	Update AWDS product loop sequences	74
M625	Generate AWDS horizontal products	74
I481	Perform synoptic scale forecasting techniques	74
I468	Amend weather forecasts	74
F387	Disseminate local weather advisories	74
F375	Cancel, extend, or amend local weather advisories	74
I507	Prepare weather advisories	72
F370	Brief commanders and staff	72
I480	Perform meteorological watches (METWATCHs)	72
K571	Display NEXRAD products	72
M626	Generate AWDS vertical products	72
E356	Record or encode PIREPs	72
E309	Display charts	70

* Average Number of Tasks Performed - 155

TABLE 52

REPRESENTATIVE TASKS PERFORMED BY ACTIVE DUTY 15W3 OFFICERS

TASKS		PERCENT MEMBERS PERFORMING (N=205)
A23	Conduct briefings or presentations	93
A117	Participate in general meetings, such as staff meetings, briefings, conferences, or workshops, other than conducting	85
A150	Write memoranda for records (MFRs)	78
F370	Brief commanders and staff	71
A38	Counsel subordinates concerning personal matters	71
A137	Supervise military personnel	71
A138	Write award or decoration nomination packages	70
A32	Conduct supervisory performance feedback sessions	68
E307	Decode weather forecasts	68
A84	Evaluate unit policies, OIs, or SOPs	67
A68	Establish unit policies, operating instructions (OIs), or standard operating procedures (SOPs)	67
A43	Determine or establish work assignments or priorities	67
A27	Conduct general meetings, such as staff meetings, briefings, conferences, or workshops	67
E300	Decode meteorological (METAR) observations	67
E298	Create computerized weather briefings	65
E312	Download weather data from government bulletin boards	65
E332	Operate weather computer software programs	64
A29	Conduct self-inspections or self-assessments	64
A119	Plan briefings, conferences, or workshops	63
A144	Write EPRs	63
F404	Participate in meteorological discussions	63
A7	Approve or disapprove correspondence, such as letters or messages	62
A80	Evaluate personnel for compliance with performance standards	62
L595	Display satellite imageries	62
E299	Decode forecast bulletins	61
A147	Write letters of appreciation	60
J537	Analyze satellite data	60
A139	Write background papers, point papers, or talking papers	59
A98	Indorse enlisted performance reports (EPRs)	59
A24	Conduct cross-staff coordination	59
E345	Prepare automatic response to query (ARQ) requests	59
F369	Brief climatological data	59
M607	Acknowledge alerts on AWDS work stations	58

* Average Number of Tasks Performed - 177

TABLE 53

TASKS WHICH BEST DIFFERENTIATE BETWEEN ACTIVE DUTY
DAFSC 15W1 AND 15W3 OFFICERS
(PERCENT MEMBERS PERFORMING)

TASKS		DAFSC 15W1 (N=43)	DAFSC 15W3 (N=205)	DIFFERENCE
E314	Encode weather forecasts	86	42	44
F378	Conduct shift change briefings	86	46	40
E356	Record or encode PIREPs	72	33	39
M625	Generate AWDS horizontal products	79	42	38
I510	Prepare weather warnings	77	39	38
I507	Prepare weather advisories	72	35	37
M619	Delete AWDS products	63	26	37
M626	Generate AWDS vertical products	76	40	37
M648	Update AWDS products	81	44	37
F377	Cancel, extend, or amend local weather watches	67	31	36
F400	Disseminate weather forecasts	81	46	35
F375	Cancel, extend, or amend local weather advisories	74	40	34
A138	Write award or decoration nomination packages	19	70	-51
A150	Write memoranda for records (MFRs)	30	79	-49
A7	Approve or disapprove correspondence, such as letters or messages	14	62	-48
A67	Establish unit goals or objectives	12	58	-46
A32	Conduct supervisory performance feedback sessions	23	68	-45
A147	Write letters of appreciation	16	60	-44
A75	Evaluate job or position descriptions	7	51	-44
A43	Determine or establish work assignments or priorities	23	67	-44
A24	Conduct cross-staff coordination	16	59	-43
A31	Conduct supervisory orientations for newly assigned personnel	12	54	-42

TABLE 54

REPRESENTATIVE TASKS PERFORMED BY ACTIVE DUTY 15W4 OFFICERS

TASKS		PERCENT MEMBERS PERFORMING (N=88)
A23	Conduct briefings or presentations	95
A21	Compile information for staff studies, staff summary sheets, or position papers	86
A24	Conduct cross-staff coordination	81
A139	Write background papers, point papers, or talking papers	78
A117	Participate in general meetings, such as staff meetings, briefings, conferences, or workshops, other than conducting	78
A27	Conduct general meetings, such as staff meetings, briefings, conferences, or workshops	71
A150	Write memoranda for records (MFRs)	70
A119	Plan briefings, conferences, or workshops	68
A138	Write award or decoration nomination packages	67
A7	Approve or disapprove correspondence, such as letters or messages	66
A36	Coordinate weather and space environment support concepts, policies, or requirements with appropriate agencies	62
A43	Determine or establish work assignments or priorities	61
A40	Critique briefings or presentations	60
A137	Supervise military personnel	59
C222	Annotate security forms for facilities or security containers	59
A154	Write trip reports	58
A38	Counsel subordinates concerning personal matters	57
A147	Write letters of appreciation	57
A16	Assign special projects to personnel for staffing actions	56
A105	Interpret policies, directives, or procedures for subordinates	54
A58	Draft agendas for general meetings, such as staff meetings, briefings, conferences, or workshops	53
A39	Create weather and space environment concepts, policies, or requirements	52

* Average Number of Tasks Performed - 80

TABLE 55

TASKS WHICH BEST DIFFERENTIATE BETWEEN ACTIVE DUTY
DAFSC 15W3 AND 15W4 OFFICERS
(PERCENT MEMBERS PERFORMING)

TASKS		DAFSC 15W3 (N=205)	DAFSC 15W4 (N=88)	DIFFERENCE
E297	Conduct public tours of weather facilities	60	10	50
E337	Perform pilot-to-METRO service (PMSV) contacts	51	5	47
F366	Brief aircrews	53	6	47
J540	Analyze Skew-T diagrams	57	11	46
F404	Participate in meteorological discussions	63	17	46
E300	Decode meteorological (METAR) observations	67	23	44
E307	Decode weather forecasts	68	25	43
E298	Create computerized weather briefings	65	23	42
J528	Analyze LAWCs	49	8	41
E370	Brief commanders and staff	72	31	41
E310	Display local weather information	57	16	41
A21	Compile information for staff studies, staff summary sheets, or position papers	57	86	-29
A24	Conduct cross-staff coordination	59	81	-22

activities (highest of all officer DAFSC groups), and 33 percent is spent on command, management, and staff activities. Table 56 also reveals the mix between supervisory and computerized weather tasks performed by this group.

ACTIVE DUTY DAFSC 15W3A. This group of 104 fully-qualified officers makes up 23 percent of the active duty officers in the survey sample. According to Table 49, 67 percent of this group are in the Management/Supervisory Job. And, unlike the 15W1A officers, very few work in the Computer Programmer Job (4 percent versus 29 percent). Table 50 shows that 53 percent of their time is spent on command, management, and staff activities. Of their average 75 tasks performed, Table 57 displays the most common. Most are managerial in nature. Table 58 shows those tasks best differentiating between 15W1A and 15W3A officers. Not surprising, 15W1A officers are more involved with computer and training tasks while 15W3A officers are more involved with managerial tasks.

ACTIVE DUTY 15W1/15W1A DAFSC COMPARISON. A comparison was also made to look at differences between those officers who did not have an A-shred and those that did. Table 59 displays those tasks which best distinguish between 15W1 and 15W1A weather officers. The primary difference between these officers is that 15W1 officers are more involved with technical weather forecasting, analysis, and dissemination activities, while those with an A-shred are more involved with computer programming.

ACTIVE DUTY 15W3/15W3A DAFSC COMPARISON. Table 60 displays those tasks which best differentiate between those officers without the shredout and those who have one. By and large, 15W3A officers are performing the same tasks as their 15W3 counterparts. However, the 15W3 officers are more involved with general weather activities and analysis of weather information.

AIR NATIONAL GUARD DAFSC 15W1. This group of 5 officers performs an average of 185 tasks. All members of this group fell into the Weather Forecaster Job (see Table 49). Table 50 shows that 20 percent of their time is spent performing command, management, and staff activities, and 17 percent is spent performing contingency and mobility activities. Another 12 percent is spent on weather forecasting activities. Table 61 displays the typical tasks performed by this group.

AIR NATIONAL GUARD DAFSC 15W3. This group of 31 officers performs an average of 191 tasks. Table 49 shows that 87 percent of this group fall into the Weather Forecaster Job. They spend their time performing a wide variety of duties, but 26 percent of their time is spent on command, management, and staff activities (see Table 50). Table 62 lists the most commonly performed tasks of this group. Table 63 lists those tasks distinguishing 15W3 officers from 15W1 personnel.

AIR NATIONAL GUARD DAFSC 15W4. This small group of 5 officers performs an average of 109 tasks. Two members of this group work in the Weather Forecaster Job, one worked in the Management/ Supervisory Job, and two officers did not group in any of the jobs identified (see Table 49). Forty-one percent of their time is spent performing command, management, and staff activities, as shown in Table 50. Table 64 shows the top tasks performed by this group and includes a mix of management and technical

TABLE 56

REPRESENTATIVE TASKS PERFORMED BY ACTIVE DUTY 15W1A OFFICERS

TASKS		PERCENT MEMBERS PERFORMING (N=17)
A117	Participate in general meetings, such as staff meetings, briefings, conferences, or workshops, other than conducting	82
A23	Conduct briefings or presentations	70
P734	Test weather computer software	53
A27	Conduct general meetings, such as staff meetings, briefings, conferences, or workshops	53
P703	Develop computer software	47
P737	Write computer software codes	47
A137	Supervise military personnel	47
A150	Write memoranda for records (MFRs)	47
A119	Plan briefings, conferences, or workshops	47
P735	Update computer software	41
P707	Evaluate effectiveness of weather computer software	41
A43	Determine or establish work assignments or priorities	41
A51	Develop or establish work methods or procedures	41
A138	Write award or decoration nomination packages	41
A32	Conduct supervisory performance feedback sessions	41
A169	Conduct OJT	41
C240	Maintain administrative files	41
A38	Counsel subordinates concerning personal matters	41
P736	Write computer runstreams	35
P729	Perform computer software maintenance	35
P704	Develop data bases	35
A36	Coordinate weather and space environment support concepts, policies, or requirements with appropriate agencies	35
A24	Conduct cross-staff coordination	35
A48	Develop individual project schedules	35
B176	Demonstrate use of equipment or tools	35
L595	Display satellite imageries	35
A80	Evaluate personnel for compliance with performance standards	35
A84	Evaluate unit policies, OIs, or SOPs	35
A144	Write EPRs	35
B171	Conduct training conferences or briefings	35
A68	Establish unit policies, operating instructions (OIs), or standard operating procedures (SOPs)	35
A78	Evaluate manpower requirements	35
C222	Annotate security forms for facilities or security containers	35

* Average Number of Tasks Performed -74

TABLE 57

REPRESENTATIVE TASKS PERFORMED BY ACTIVE DUTY 15W3A OFFICERS

TASKS		PERCENT MEMBERS PERFORMING (N=104)
A23	Conduct briefings or presentations	86
A117	Participate in general meetings, such as staff meetings, briefings, conferences, or workshops, other than conducting	83
A27	Conduct general meetings, such as staff meetings, briefings, conferences, or workshops	67
A139	Write background papers, point papers, or talking papers	67
A150	Write memoranda for records (MFRs)	62
A138	Write award or decoration nomination packages	62
A21	Compile information for staff studies, staff summary sheets, or position papers	60
A43	Determine or establish work assignments or priorities	60
A119	Plan briefings, conferences, or workshops	60
A24	Conduct cross-staff coordination	59
A154	Write trip reports	58
A40	Critique briefings or presentations	58
A137	Supervise military personnel	57
A32	Conduct supervisory performance feedback sessions	55
A38	Counsel subordinates concerning personal matters	55
A61	Escort visiting officials	48
C222	Annotate security forms for facilities or security containers	47
A36	Coordinate weather and space environment support concepts, policies, or requirements with appropriate agencies	46
A7	Approve or disapprove correspondence, such as letters or messages	45
A58	Draft agendas for general meetings, such as staff meetings, briefings, conferences, or workshops	44
A144	Write EPRs	43
A86	Evaluate weather and space environmental technical solutions	42
A75	Evaluate job or position descriptions	42
A80	Evaluate personnel for compliance with performance standards	41

* Average Number of Tasks Performed - 75

TABLE 58

TASKS WHICH BEST DIFFERENTIATE BETWEEN ACTIVE DUTY
DAFSC 15W1A AND 15W3A OFFICERS
(PERCENT MEMBERS PERFORMING)

TASKS		DAFSC 15W1A (N=17)	DAFSC 15W3A (N=104)	DIFFERENCE
P735	Update computer software	41	11	30
P736	Write computer runstreams	35	5	30
P734	Test weather computer software	53	23	30
P737	Write computer software codes	47	17	30
P729	Perform computer software maintenance	35	8	29
B183	Develop skill performance tests	29	3	26
P730	Prepare computer software documentation	29	5	24
B188	Establish training policies or requirements	35	12	23
P703	Develop computer software	47	24	23
B171	Conduct training conferences or briefings	35	12	23
P702	Determine flow sequences of computer software	29	7	22
B179	Develop formal training programs, plans, or procedures	29	7	22
A21	Compile information for staff studies, staff summary sheets, or position papers	24	60	-36
A139	Write background papers, point papers, or talking papers	35	67	-32
A85	Evaluate weather and space environment support requirements	12	41	-29
A147	Write letters of appreciation	18	43	-25
A131	Review policy letters	12	37	-25
A86	Evaluate weather and space environment technical solutions	18	42	-24
A141	Write civilian work plans, job elements, or job standards	0	24	-24
A29	Conduct self-inspections or self-assessments	12	36	-24
A24	Conduct cross-staff coordination	35	59	-24
A5	Allocate or designate use of equipment or supplies	12	35	-23

TABLE 59

TASKS WHICH BEST DIFFERENTIATE BETWEEN ACTIVE DUTY
DAFSC 15W1 AND 15W1A OFFICERS
(PERCENT MEMBERS PERFORMING)

TASKS		DAFSC 15W1 (N=43)	DAFSC 15W1A (N=17)	DIFFERENCE
E314	Encode weather forecasts	86	6	80
F366	Brief aircrews	86	6	80
M607	Acknowledge alerts on AWDS work stations	91	12	79
M648	Update AWDS products	81	6	75
F400	Disseminate weather forecasts	81	6	75
F378	Conduct shift change briefings	86	12	74
M620	Display AWDS products	86	12	74
M633	Perform AWDS command sequences	79	6	73
E337	Perform pilot-to-METRO service (PMSV) contacts	77	6	71
I510	Prepare weather warnings	77	6	71
F388	Disseminate local weather warnings	77	6	71
P703	Develop computer software	0	47	-47
P737	Write computer software codes	0	47	-47
P734	Test weather computer software	12	53	-41
P736	Write computer runstreams	0	35	-35
P707	Evaluate effectiveness of weather computer software	7	41	-34
P735	Update computer software	7	41	-34
P729	perform computer software maintenance	2	35	-33
P704	Develop data bases	5	35	-30
A27	Conduct general meetings, such as staff meetings, briefings, conferences, or workshops, other than conducting	26	53	-27
P730	Prepare computer software documentation	2	29	-27
P702	Determine flow sequences of computer software	2	29	-27

TABLE 60

TASKS WHICH BEST DIFFERENTIATE BETWEEN ACTIVE DUTY
DAFSC 15W3 AND 15W3A OFFICERS
(PERCENT MEMBERS PERFORMING)

TASKS		DAFSC 15W3 (N=205)	DAFSC 15W3A (N=104)	DIFFERENCE
E298	Create computerized weather briefings	65	16	49
F366	Brief aircrews	53	4	49
M607	Acknowledge alerts on AWDS work stations	59	12	47
F370	Brief commanders and staff	72	25	47
J550	Analyze vorticity charts	54	8	46
J544	Analyze surface charts	58	12	46
J528	Analyze LAWCs	49	4	45
E337	Perform Pilot-to-METRO service (PMSV) contacts	51	6	45
E307	Decode weather forecasts	68	23	45
M620	Display AWDS products	58	14	44
T939	Obtain light data using PCs	50	7	43
E300	Decode meteorological (METAR) observations	67	24	43
J546	Analyze thickness charts	52	9	43
M633	Perform AWDS command sequences	51	10	41
I480	Perform meteorological watches (METWATCHs)	48	7	41
F400	Disseminate weather forecasts	46	5	41

TABLE 61

REPRESENTATIVE TASKS PERFORMED BY AIR NATIONAL GUARD 15W1 OFFICERS

TASKS		PERCENT MEMBERS PERFORMING (N=5)
A23	Conduct briefings or presentations	100
A137	Supervise military personnel	100
F400	Disseminate weather forecasts	100
F370	Brief commanders and staff	100
U977	Assemble tents	100
F404	Participate in meteorological discussions	100
I476	Extract information from weather plots	100
U1007	Select sites at deployed locations	100
A27	Conduct general meetings, such as staff meetings, briefings, conferences, or workshops	100
U995	Participate in convoy operations	100
J546	Analyze thickness charts	100
I468	Amend weather forecasts	100
J550	Analyze vorticity charts	100
J544	Analyze surface charts	100
J540	Analyze Skew-T diagrams	100
U1008	Set up antennas at deployed locations	100
F389	Disseminate local weather watches	100
F387	Disseminate local weather advisories	100
A81	Evaluate personnel for promotion, demotion, reclassification, or special awards	100
F388	Disseminate local weather warnings	100
I507	Prepare weather advisories	100
T895	Analyze feasibility of weather OPLANs	80
J548	Analyze upper-air charts	80
T914	Determine personnel requirements for mobility exercises or deployments	80
T913	Determine equipment requirements for mobility exercises or deployments	80
A84	Evaluate unit policies, OIs, or SOPs	80
I475	Extract information from climatological records	80
F369	Brief climatological data	80
T947	Participate in exercise or mobility deployment planning meetings	80
A124	Plan deployments of equipment or personnel	80

* Average Number of Tasks Performed - 185

TABLE 62

REPRESENTATIVE TASKS PERFORMED BY AIR NATIONAL GUARD 15W3 OFFICERS

TASKS		PERCENT MEMBERS PERFORMING (N=31)
J548	Analyze upper-air charts	90
J528	Analyze LAWCs	90
T951	Perform self-aid and buddy care techniques	90
I510	Prepare weather warnings	90
I507	Prepare weather advisories	90
F404	Participate in meteorological discussions	87
J550	Analyze vorticity charts	87
J544	Analyze surface charts	87
I511	Prepare weather watches	87
A23	Conduct briefings or presentations	84
A40	Critique briefings or presentations	84
J540	Analyze Skew-T diagrams	84
T939	Obtain light data using PCs	84
F378	Conduct shift change briefings	84
J537	Analyze satellite data	84
I480	Perform meteorological watches (METWATCHs)	84
F370	Brief commanders and staff	81
E307	Decode weather forecasts	81
T924	Don or doff chemical warfare personal field gear	81
E314	Encode weather forecasts	81
F366	Brief aircrews	81
E300	Decode meteorological (METAR) observations	81
I468	Amend weather forecasts	81
A38	Counsel subordinates concerning personal matters	77
A84	Evaluate unit policies, OIs, or SOPs	77
E309	Display charts	77
F375	Cancel, extend, or amend local weather advisories	77
F376	Cancel, extend, or amend local weather warnings	77
F377	Cancel, extend, or amend local weather watches	77
I519	Verify weather forecasts	77
I518	Verify weather advisories	77
F400	Disseminate weather forecasts	74
E332	Operate weather computer software programs	74
F389	Disseminate local weather watches	74
A137	Supervise military personnel	74

* Average Number of Tasks Performed - 191

TABLE 63

TASKS WHICH BEST DIFFERENTIATE BETWEEN AIR NATIONAL GUARD
DAFSC 15W1 AND 15W3 OFFICERS
(PERCENT MEMBERS PERFORMING)

TASKS		DAFSC 15W1 (N=5)	DAFSC 15W3 (N=31)	DIFFERENCE
F403	Disseminate weather observations	80	23	57
T895	Analyze feasibility of weather OPLANs	80	23	57
T940	Operate Manual Observing Systems (MOSs)	80	29	51
U998	Perform disease and pestilence prevention	60	10	50
U1008	Set up antennas at deployed locations	100	55	45
A61	Escort visiting officials	60	16	44
G421	Determine ceiling	80	39	41
E364	Verify accuracy of clocks	60	19	41
U1007	Select sites at deployed locations	100	61	39
F402	Disseminate weather messages	60	23	37
G440	Measure heights of cloud layers	60	23	37
T964	Set up MOSs	60	23	37
J527	Analyze horizontal weather depiction charts	0	65	-65
T925	Encode or decode military grid reference system (MGRS) positions	0	61	-61
E314	Encode weather forecasts	20	81	-61
A113	Maintain or update weather support plan	0	55	-55
J525	Analyze continuity data	0	55	-55
I486	Prepare chemical downwind messages	20	74	-54
E299	Decode forecast bulletins	20	71	-51
J528	Analyze LAWCs	40	90	-50
I488	Prepare Electro Optics Tactical Decision Aid (EOTDA) forecasts	0	48	-48

TABLE 64

REPRESENTATIVE TASKS PERFORMED BY AIR NATIONAL GUARD 15W4 OFFICERS

TASKS		PERCENT MEMBERS PERFORMING (N=5)
A117	Participate in general meetings, such as staff meetings, briefings, conferences, or workshops, other than conducting	80
A27	Conduct general meetings, such as staff meetings, briefings, conferences, or workshops	80
A23	Conduct briefings or presentations	80
I508	Prepare weather effects matrixes for combat operations	80
E332	Operate weather computer software programs	80
A51	Develop or establish work methods or procedures	80
A2	Administer personnel or unit recognition or award programs	80
U977	Assemble tents	80
E300	Decode meteorological (METAR) observations	80
U1008	Set up antennas at deployed locations	80
U1009	Set up or operate field generators	80
U975	Analyze Army artillery meteorological (ARMYMET) data	80
A137	Supervise military personnel	60
A151	Write OPRs	60
I480	Perform meteorological watches (METWATCHs)	60
J537	Analyze satellite data	60
J540	Analyze Skew-T diagrams	60
F378	Conduct shift change briefings	60
I477	Integrate product analyses into time-efficient forecast processes, such as terminal aerodrome forecast (TAF) worksheets	60
I507	Prepare weather advisories	60
I519	Verify weather forecasts	60
I510	Prepare weather warnings	60
I518	Verify weather advisories	60
A67	Establish unit goals or objectives	60
A138	Write award or decoration nomination packages	60
F404	Participate in meteorological discussions	60
J550	Analyze vorticity charts	40
I502	Prepare short-range weather forecasts	40
J548	Analyze upper-air charts	40
I503	Prepare terminal forecasts, other than centralized	40

* Average Number of Tasks Performed - 109

tasks. Table 65 shows those tasks that best differentiate between DAFSCs 15W3 and 15W4. Analyzing weather information tasks were more predominant among 15W3 officers, while contingency, mobility, and army support tasks were more prevalent among 15W4 officers.

AIR FORCE RESERVE DAFSC 15W3. These 15 officers perform an average of 83 tasks. According to Table 49, all 15 are in the Aerial Reconnaissance Job. Subsequently, 41 percent of their time is spent performing weather reconnaissance aircraft activities (see Table 50). Table 66 displays many of the weather reconnaissance aircraft tasks performed by this group.

Active Duty, Air National Guard, and Reserve Officer Comparisons

ACTIVE DUTY VERSUS AIR NATIONAL GUARD. Table 67 shows those tasks distinguishing active duty officers from those in the ANG. Like the enlisted force, active duty officers perform more AWDS and command, management, and staff tasks than guardsmen, while ANG officers perform more Army support activities.

ACTIVE DUTY VERSUS AIR FORCE RESERVE. Table 68 shows those tasks that differentiate active duty DAFSC 15W3 officers from those in the Air Force Reserve. Active duty 15W3 officers perform more command, management, and staff activities than the reservists, while the reservists perform more weather reconnaissance aircraft activities.

Summary

Distinctions between officer groups are apparent, with entry-level personnel spending much of their job time performing technical weather tasks, while the fully-qualified and staff-level personnel perform a more managerial and supervisory role. Guardsmen perform more contingency and mobility and Army support activities, and reservists perform primarily weather reconnaissance aircraft activities.

TRAINING ANALYSIS

As with the enlisted personnel, data were compiled for those officers with 1-48 months time in utilization field (TIUF). This gives training personnel an idea of what tasks active duty officers are performing early in their careers.

First-Assignment Personnel

In this study, there are 107 active duty members with 1-48 months TIUF, representing 23 percent of the active duty Weather officers in the survey sample. These personnel spend the highest percent of their relative job time performing command, management, and staff activities (17 percent). However, they are also spending slightly over half their time on technical activities, such as general weather activities, performing AWDS activities, analyzing weather information, performing weather forecasting activities, and disseminating weather information (see Table 69). Table 70 displays the top tasks performed by these

TABLE 65

TASKS WHICH BEST DIFFERENTIATE BETWEEN AIR NATIONAL GUARD
DAFSC 15W3 AND 15W4 PERSONNEL (PERCENT MEMBERS PERFORMING)

TASKS		DAFSC 15W3 (N=31)	DAFSC 15W4 (N=5)	DIFFERENCE
J546	Analyze thickness charts	71	0	71
J545	Analyze temperature charts	68	0	68
A79	Evaluate mobility, contingency, disaster preparedness, or unit emergency or alert plans	68	0	68
J552	Analyze wind charts	68	0	68
J529	Analyze moisture charts	68	0	68
J527	Analyze horizontal weather depiction charts	65	0	65
F377	Cancel, extend, or amend local weather watches	77	20	57
J525	Analyze continuity data	55	0	55
I486	Prepare chemical downwind messages	74	20	54
F389	Disseminate local weather watches	74	20	54
B176	Demonstrate use of equipment or tools	52	0	52
T963	Select high frequency radio broadcasting (HFRB)	23	60	-37
U975	Analyze Army artillery meteorological (ARTYMET) data	48	80	-32
A51	Develop or establish work methods or procedures	48	80	-32
F391	Disseminate PIREPs	10	40	-30
T968	Set up tactical facsimile machines	32	60	-28
U1008	Set up antennas at deployed locations	55	80	-25
T942	Operate TACCOM equipment	35	60	-25
A2	Administer personnel or unit recognition or award programs	58	80	-22
B188	Establish training policies or requirements	39	60	-21
A151	Write OPRs	39	60	-21
U979	Conduct intelligence preparations of battlefield (IPB)	39	60	-21

TABLE 66

REPRESENTATIVE TASKS PERFORMED BY AIR FORCE RESERVE 15W3 PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=15)
O686	Perform flight crew checklist tasks	100
O678	Encode horizontal observation data	100
O676	Disseminate weather reconnaissance data	100
O672	Conduct tropical cyclone mission procedures	100
O680	Encode tropical cyclone vortex data	100
O690	Perform meteorological systems calibration procedures	100
O669	Archive weather reconnaissance mission meteorological data	100
O681	Evaluate aircraft platform data for dropsonde release	100
O692	Perform preflight inspections of weather reconnaissance aircraft	100
O679	Encode tropical cyclone supplementary vortex data	100
O691	Perform postflight procedures	100
O689	Perform in-flight inspections on reconnaissance aircraft weather equipment	100
O673	Conduct tropical disturbance investigative mission procedures	100
O688	Perform Improved Weather Reconnaissance System (IWRS) degraded operations tasks	100
O674	Conduct winter storm reconnaissance mission procedures	100
O694	Perform weather reconnaissance flight and mission planning activities	93
O675	Coordinate specific weather reconnaissance mission requirements with customer	93
O682	Evaluate dropsonde data on weather reconnaissance aircraft	93
O671	Conduct tasked special operations and research mission procedures	93
O693	Perform emergency equipment procedures on weather reconnaissance aircraft	93
O683	Evaluate reconnaissance aircraft generated meteorological data	87
G430	Determine number and amount of coverage of cloud layers	80

* Average Number of Tasks Performed - 83

TABLE 67

TASKS WHICH BEST DIFFERENTIATE BETWEEN ACTIVE DUTY
AND AIR NATIONAL GUARD OFFICERS
(PERCENT MEMBERS PERFORMING)

TASKS		ACTIVE DUTY OFFICERS (N=457)	AIR NATIONAL GUARD OFFICERS (N=41)	DIFFERENCE
A21	Compile information for staff studies, staff summary sheets, or position papers	58	12	46
A139	Write background papers, point papers, or talking papers	61	17	44
A144	Write EPRs	50	7	43
M607	Acknowledge alerts on AWDS work stations	43	2	41
M620	Display AWDS products	42	2	40
M633	Perform AWDS command sequences	37	0	37
A150	Write memoranda for records (MFRs)	68	32	36
M641	Print AWDS alphanumeric or graphics products	36	0	36
A98	Indorse enlisted performance reports (EPRs)	45	10	35
A118	Perform sponsorship duties	37	2	35
A32	Conduct supervisory performance feedback sessions	57	24	33
M625	Generate AWDS horizontal products	32	0	32
T951	Perform self-aid and buddy care techniques	18	85	-67
U977	Assemble tents	7	71	-64
U995	Participate in convoy operations	4	68	-64
I507	Prepare weather advisories	25	88	-63
U1009	Set up or operate field generators	5	66	-61
I511	Prepare weather watches	19	80	-61
U1007	Select sites at deployed locations	5	66	-61
I508	Prepare weather effects matrixes for combat operations	9	68	-59
U1000	Perform land navigations	4	63	-59

TABLE 68

TASKS WHICH BEST DIFFERENTIATE BETWEEN ACTIVE DUTY DAFSC 15W3
AND AIR FORCE RESERVE 15W3 OFFICERS
(PERCENT MEMBERS PERFORMING)

TASKS		ACTIVE DUTY DAFSC 15W3 (N=205)	AF RESERVE DAFSC 15W3 (N=15)	DIFFERENCE
A68	Establish unit policies, operating instructions (OIs), or standard operating procedures (SOPs)	67	0	67
E298	Create computerized weather briefings	65	0	65
E312	Download weather data from government bulletin boards	65	0	65
A137	Supervise military personnel	71	7	64
A38	Counsel subordinates concerning personal matters	71	7	64
A138	Write award or decoration nomination packages	70	7	63
A144	Write EPRs	63	0	63
A32	Conduct supervisory performance feedback sessions	68	7	61
A84	Evaluate unit policies, OIs, or SOPs	67	7	60
A98	Indorse enlisted performance reports (EPRs)	60	0	60
A43	Determine or establish work assignments or priorities	67	7	60
O690	Perform meteorological systems calibration procedures	0	100	-100
O689	Perform in-flight inspections on reconnaissance aircraft weather equipment	0	100	-100
O688	Perform Improved Weather Reconnaissance System (IWRS) degraded operations tasks	0	100	-100
O679	Encode tropical cyclone supplementary vortex data	0	100	-100
O686	Perform flight crew checklist tasks	0	100	-100
O669	Archive weather reconnaissance mission meteorological data	0	100	-100
O676	Disseminate weather reconnaissance data	0	100	-100
O691	Perform postflight procedures	0	100	-100
O674	Conduct winter storm reconnaissance mission procedures	0	100	-100
O681	Evaluate aircraft platform data for dropsonde release	0	100	-100

TABLE 69

RELATIVE PERCENT TIME SPENT ON DUTIES BY ACTIVE DUTY 15WX/A OFFICERS WITH 1-48 MONTHS TIME IN UTILIZATION FIELD

TASKS		PERCENT TIME SPENT (N=107)
A	PERFORMING COMMAND, MANAGEMENT, AND STAFF ACTIVITIES	17
B	PERFORMING TRAINING ACTIVITIES	4
C	PERFORMING GENERAL ADMINISTRATIVE ACTIVITIES	4
D	PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	2
E	PERFORMING GENERAL WEATHER ACTIVITIES	15
F	DISSEMINATING WEATHER INFORMATION	9
G	PERFORMING WEATHER OBSERVING ACTIVITIES	3
H	PLOTTING WEATHER INFORMATION	1
I	PERFORMING WEATHER FORECASTING ACTIVITIES	9
J	ANALYZING WEATHER INFORMATION	10
K	OBSERVING WEATHER BY RADAR	6
L	PERFORMING WEATHER SATELLITE ACTIVITIES	2
M	PERFORMING AUTOMATED WEATHER DISTRIBUTION SYSTEM (AWDS) ACTIVITIES	10
N	TAKING UPPER AIR OBSERVATIONS	*
O	PERFORMING WEATHER RECONNAISSANCE AIRCRAFT ACTIVITIES	*
P	PERFORMING COMPUTERIZED WEATHER ACTIVITIES	2
Q	PERFORMING SPACE ENVIRONMENT SUPPORT (SES) CENTRAL ACTIVITIES	1
S	PERFORMING SPECIAL OPERATIONS ACTIVITIES	*
T	PERFORMING CONTINGENCY AND MOBILITY ACTIVITIES	7
U	PERFORMING ARMY SUPPORT ACTIVITIES	1

* Denotes less than .5 percent

TABLE 70

TASKS PERFORMED BY
ACTIVE DUTY 15WX/A OFFICERS WITH
1-48 MONTHS TIME IN UTILIZATION FIELD

TASKS		PERCENT MEMBERS PERFORMING (N=107)
A23	Conduct briefings or presentations	93
M607	Acknowledge alerts on AWDS work stations	83
F366	Brief aircrews	79
E300	Decode meteorological (METAR) observations	79
M620	Display AWDS products	79
E307	Decode weather forecasts	79
F370	Brief commanders and staff	78
L595	Display satellite imageries	78
J540	Analyze Skew-T diagrams	78
J537	Analyze satellite data	77
J544	Analyze surface charts	77
F404	Participate in meteorological discussions	76
E345	Prepare automatic response to query (ARQ) requests	76
F378	Conduct shift change briefings	74
J548	Analyze upper-air charts	72
E298	Create computerized weather briefings	71
E332	Operate weather computer software programs	71
E309	Display charts	71
E337	Perform pilot-to-METRO service (PMSV) contacts	71
M633	Perform AWDS command sequences	70
E310	Display local weather information	69
J550	Analyze vorticity charts	69
M641	Print AWDS alphanumeric or graphics products	69
E299	Decode forecast bulletins	69
A117	Participate in general meetings, such as staff meetings, briefings, conferences, or workshops, other than conducting	68
K571	Display NEXRAD products	68
J528	Analyze LAWCs	68
M648	Update AWDS products	67
J546	Analyze thickness charts	67
E301	Decode pilot reports (PIREPs)	67
I481	Perform synoptic scale forecasting techniques	66
M625	Generate AWDS horizontal products	66

personnel. Distribution of these personnel across the career field jobs is displayed in Figure 3. This figure shows that 71 percent of these officers are in the Weather Forecaster Job and only 9 percent are in the Management/Supervisory Job.

Table 71 presents percentages of active duty officers with 1-48 months TIUF responding positively to questions concerning their use of weather equipment. Again, this type of information is useful for training personnel to assist them in focusing limited training time or other resources on the most utilized items.

Training Emphasis (TE) Data

TE data were collected for officers to assist training personnel in deciding which tasks should be emphasized in entry-level training. These ratings, once again, are based on the judgments of senior career field officers working at operational units, and are collected to provide training personnel with a rank-ordering of those tasks in the JI considered important for first-assignment officer training. The top-rated TE tasks are presented in Table 72. Most of the tasks having high TE ratings are technical in nature, covering general weather activities and analysis of weather information. Most of these tasks are performed by high percentages of officers in both their first job (1-24 months TIUF) and in their first assignment (1-48 months TIUF).

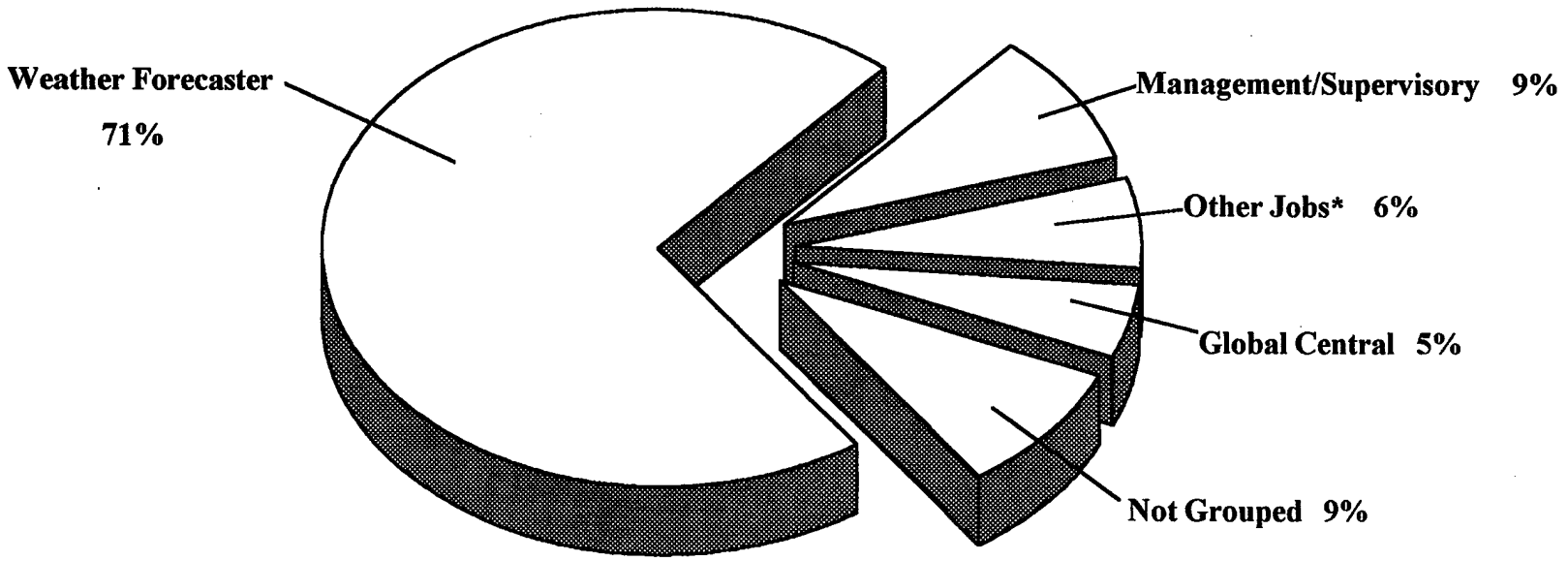
ANALYSIS OF MAJOR COMMANDS (MAJCOM)

Tasks and background data of the MAJCOMs or field operating agencies with the largest AFSC 15WX/A populations were compared to determine whether job content varied as a function of command assignment (see Table 73). Overall, there were no major differences between MAJCOM groups. All MAJCOMs showed high relative time spent in performing command, management, and staff activities and were spending similar amounts of time across each of the duties in the job inventory. A few minor differences were noted, however. AWS officers spend far more of their time on command, management, and staff activities than other commands. AETC officers spend more time than the other MAJCOMs performing training activities. And, as was the case with the enlisted personnel, ANG officers spend much less of their time performing command, management, and staff activities and more time spent performing contingency and mobility activities and weather forecasting. Reservists spend a substantially larger amount of time performing weather reconnaissance aircraft activities than any other MAJCOM.

PAYGRADE COMPARISONS

Data were also compared for officers in the various paygrade groups. Officers in this study ranged in grade from Second Lieutenant (O-1) up to Colonel (O-6). Table 74 displays the time spent on duties for each of the officer paygrade groups. In general, a very typical and normal progression is seen as one moves from an O-1 up to O-6. Time spent on performing command, management, and staff activities increase dramatically as one moves from O-2 to O-3 and continues to increase up to O-6. Subsequently, time spent on technical duties decreases as paygrade increases.

AFSC 15WX/A ACTIVE DUTY OFFICERS WITH 1-48 MONTHS TIUF (N=107)



* Includes Contingency/Mobility, Space Environment Support, Training, and Computer Programmer Jobs

FIGURE 3

TABLE 71

EQUIPMENT USED OR OPERATED BY 20 PERCENT OR MORE OF ACTIVE DUTY 15WX/A OFFICERS WITH 1-48 MONTHS TIUF

GENERAL EQUIPMENT	PERCENT MEMBERS RESPONDING (N=107)
Pilot-to-METRO Services Radios	73
Radar Sets, WSR-88D	65
Audiovisual Equipment	62
Lightning Detection Systems (LDSs)	54
Ceilometers, Laser Beam (LBC), AN/GMQ-34	52
Ambient Temperature and Dewpoint Measuring Sets, AN/FMQ-8	43
Automatic Telephone Answering Devices	41
Interactive Video Disc Equipment	39
Barometers, ML-658/GM Digital Altimeter (DBASI)	36
Precipitation Measuring Equipment	36
Wind Sets, AN/FMQ-11/13/20	36
Backup Generators	33
Sling Psychrometers, ML-24	30
Radars, Dial-Up	25
Transmissometers, AN/GMQ-10/32	23
Voice Telecommunication Systems	21
SATELLITE EQUIPMENT	
Satellite Looper Systems	86

TABLE 71 (CONTINUED)

EQUIPMENT USED OR OPERATED BY 20 PERCENT OR MORE OF ACTIVE DUTY 15WX/A OFFICERS WITH 1-48 MONTHS TIUF

TACTICAL EQUIPMENT	PERCENT MEMBERS RESPONDING (N=107)
Meteorological Sets, such as AN/TMQ-34	46
Global Positioning Systems (GPSs)	46
Alden Minifaxes, 9315R, T/R, TRT	46
Ceilometers, Portable Laser, AN/GMQ-33	43
Barometers, Digital Handheld	40
Staff Weather Officer (SWO) Kit, electronic	37
Manual Observing Systems (MOSs)	36
Belt Weather Kits	36
Air Force Meteorological Imagery Terminal (AFMIT)	36
Goldwings	35
Small Arms, such as .38 and 9mm caliber pistols and M-16 rifles	35
Chemical Defense Equipment	33
Anemometers, Sims	30
Encoders/Decoders, Cryptological Communication Security, KL-43C, KLI-18, and KG-84	28
Weather Observing Kits	25
Generators	24
Secure Telephone Units (STUs)	23
Quick Reaction Communication Terminals(QRCTs), AN/GRQ-27	21
Barometers, Tactical Aneroid	20
Wind Sets, Portable	20
Weather Equipment Kits	20
SWO Kit, other than electronic	20
Satellite Receivers, Portable	20
AUTOMATED WEATHER DISTRIBUTION SYSTEM (AWDS)	
Base Weather Stations (BWSs)	83
Printers, Alphanumerics	80
Printers, Graphics	78
Staff Weather Officer/Wing Weather Officer Terminals	69
Aircrew Briefing Terminals (ABTs)	67
Meteorological Processors (MPs)	40
Remote Staff Weather Officer (RSWO) Terminals	27
Air Traffic Control/Flight Operations (ATC/FO) Terminals	26
Primary Observer Terminals (POBSs)	22
Notice to Airmen (NOTAM) Terminals	21
Flight Control Facilities/Flight Operations (FCF/FO) Terminals	21

TABLE 72

ACTIVE DUTY 15WX/A TASKS RATED HIGHEST IN TRAINING EMPHASIS (TE)

TASKS		TNG EMP*	PERCENT MEMBERS PERFORMING 1-24 MOS (N=62)	PERCENT MEMBERS PERFORMING 1-48 MOS (N=107)
J537	Analyze satellite data	7.41	79	77
F366	Brief aircrews	7.41	84	79
J540	Analyze Skew-T diagrams	7.07	79	78
F370	Brief commanders and staff	7.07	81	78
I481	Perform synoptic scale forecasting techniques	7.00	77	66
K568	Determine severe weather signatures	6.97	55	50
J544	Analyze surface charts	6.83	85	77
J528	Analyze LAWCs	6.76	79	68
J548	Analyze upper-air charts	6.72	77	72
J538	Analyze severe convective weather parameters	6.66	45	40
I479	Perform mesoscale forecasting techniques	6.62	77	60
M620	Display AWDS products	6.62	87	79
I503	Prepare terminal forecasts, other than centralized	6.59	34	23
L597	Enhance satellite imageries	6.52	66	60
E307	Decode weather forecasts	6.48	77	79
M625	Generate AWDS horizontal products	6.48	81	66
K571	Display NEXRAD products	6.48	76	68
T943	Operate TACMET equipment	6.48	39	37
M626	Generate AWDS vertical products	6.48	69	62
E314	Encode weather forecasts	6.48	79	66
I510	Prepare weather warnings	6.45	74	60
E300	Decode meteorological (METAR) observations	6.45	82	79
E301	Decode pilot reports (PIREPs)	6.41	76	67
J531	Analyze numerical weather products (NWPs)	6.41	65	56
J535	Analyze radar products	6.41	61	52

* Mean TE Rating is 2.28, and Standard Deviation is 1.85 (High TE = 4.13)

TABLE 73

PERCENTAGE OF TIME SPENT ON DUTIES BY MAJCOM GROUPS

	DUTIES	USAFE (N=41)	AETC (N=37)	PACAF (N=41)	ACC (N=80)	AMC (N=32)	AFMC (N=34)	AFSPC (N=46)	AWS (N=112)	ANG (N=41)	AR (N=15)
A	PERFORMING COMMAND, MANAGEMENT, AND STAFF ACTIVITIES	35	29	36	30	35	46	56	70	27	10
B	PERFORMING TRAINING ACTIVITIES	4	14	4	3	3	5	4	5	7	5
C	PERFORMING GENERAL ADMINISTRATIVE ACTIVITIES	5	3	4	4	4	5	5	5	2	1
D	PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	2	1	1	1	2	2	1	1	*	1
E	PERFORMING GENERAL WEATHER ACTIVITIES	12	10	12	12	12	8	6	3	9	12
F	DISSEMINATING WEATHER INFORMATION	5	4	7	7	6	3	3	1	7	3
G	PERFORMING WEATHER OBSERVING ACTIVITIES	3	2	2	2	1	1	1	*	5	9
H	PLOTTING WEATHER INFORMATION	*	1	1	*	*	*	*	-	1	1
I	PERFORMING WEATHER FORECASTING ACTIVITIES	6	6	7	8	6	4	3	*	11	2
J	ANALYZING WEATHER INFORMATION	7	12	6	8	7	6	3	1	9	6
K	OBSERVING WEATHER BY RADAR	1	4	3	5	5	2	3	1	*	2
L	PERFORMING WEATHER SATELLITE ACTIVITIES	2	1	3	2	1	1	2	1	1	*
M	PERFORMING AUTOMATED WEATHER DISTRIBUTION SYSTEM (AWDS) ACTIVITIES	7	4	5	6	8	3	2	2	*	4
N	TAKING UPPER AIR OBSERVATIONS	*	-	-	*	-	2	*	-	*	-
O	PERFORMING WEATHER RECONNAISSANCE AIRCRAFT ACTIVITIES	-	-	*	*	-		*	-	-	41
P	PERFORMING COMPUTERIZED WEATHER ACTIVITIES	1	5	1	*	*	6	*	8	1	1
Q	PERFORMING SPACE ENVIRONMENT SUPPORT (SES) CENTRAL ACTIVITIES	-	*	*	*	-	*	-	*	-	-
R	PERFORMING SOLAR ANALYSIS ACTIVITIES	-	*	-	-	-	*	1	-	*	-
S	PERFORMING SPECIAL OPERATIONS ACTIVITIES	-	*	*	*	-	-	-	*	*	-
T	PERFORMING CONTINGENCY AND MOBILITY ACTIVITIES	9	2	7	9	10	4	1	1	15	*
U	PERFORMING ARMY SUPPORT ACTIVITIES	1	*	1	1	*	-	-	*	6	-

* Denotes less than .5 percent

TABLE 74

PERCENT TIME SPENT ON DUTIES BY ACTIVE DUTY OFFICER PAYGRADE GROUPS

DUTIES	O-1 (N=57)	O-2 (N=37)	O-3 (N=217)	O-4 (N=98)	O-5 (N=36)	O-6 (N=12)
A PERFORMING COMMAND, MANAGEMENT, AND STAFF ACTIVITIES	10	18	43	63	82	90
B PERFORMING TRAINING ACTIVITIES	3	4	6	6	4	3
C PERFORMING GENERAL ADMINISTRATIVE ACTIVITIES	3	4	6	6	4	2
D PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	1	2	2	1	*	*
E PERFORMING GENERAL WEATHER ACTIVITIES	16	14	9	6	2	1
F DISSEMINATING WEATHER INFORMATION	10	7	4	2	1	1
G PERFORMING WEATHER OBSERVING ACTIVITIES	5	2	1	*	*	-
H PLOTTING WEATHER INFORMATION	1	1	*	*	*	*
I PERFORMING WEATHER FORECASTING ACTIVITIES	12	8	4	2	1	*
J ANALYZING WEATHER INFORMATION	12	9	5	3	*	*
K OBSERVING WEATHER BY RADAR	7	6	2	1	*	*
L PERFORMING WEATHER SATELLITE ACTIVITIES	2	3	2	1	*	*
M PERFORMING AUTOMATED WEATHER DISTRIBUTION SYSTEM (AWDS) ACTIVITIES	11	9	3	1	*	-
N TAKING UPPER AIR OBSERVATIONS	*	*	*	*	*	-
O PERFORMING WEATHER RECONNAISSANCE AIRCRAFT ACTIVITIES	*	-	*	-	-	-
P PERFORMING COMPUTERIZED WEATHER ACTIVITIES	*	2	6	2	1	*
Q PERFORMING SPACE ENVIRONMENT SUPPORT (SES) CENTRAL ACTIVITIES	*	*	1	1	1	-
R PERFORMING SOLAR ANALYSIS ACTIVITIES	-	-	*	*	-	-
S PERFORMING SPECIAL OPERATIONS ACTIVITIES	*	*	*	*	-	-
T PERFORMING CONTINGENCY AND MOBILITY ACTIVITIES	6	9	5	4	2	1
U PERFORMING ARMY SUPPORT ACTIVITIES	1	2	1	1	*	*

* Denotes less than .5 percent

JOB SATISFACTION

As mentioned earlier, an examination of job satisfaction indicators can give career field managers a better understanding of some of the factors which may affect the job performance of officers in the career field. Questions covering job interest, perceived utilization of talents and training, and sense of accomplishment were included in the survey booklet. Tables 75 and 76 present job satisfaction data for various active duty officer groups within the Weather career field.

Table 75 presents data for active duty AFSC 15WX/A TIUF groups. As reflected in this table, Weather officers are generally quite satisfied. Job satisfaction tends to improve over time in all areas listed. Table 76 presents data for active duty officer DAFSC groups. As with TIUF groups, job satisfaction across the various DAFSC groups was also high. The only area of concern noted was the lower percentage of AFSC 15W1A personnel (65 percent) who felt their training was well utilized. However, these same officers had extremely high job interest and perceived utilization of talents.

IMPLICATIONS

From the standpoint of the data gathered during this occupational survey, the AFSC 1W0X1/A and 15WX/A career field structure reflects a fairly bipolar sample, with the Weather Forecaster and Weather Observer jobs comprising two thirds of the survey sample. Aside from the Management/Supervisory and Training jobs, the remainder of the career field serve across a broad spectrum of jobs, ranging from Mobility/Contingency, Satellite Analysis, Computer Programmer, and Solar Analyst to Space Environment Support, Aerial Recon Weather, and Automated Weather Distribution System. Job progression for AFSC 1W0X1/A personnel showed a distinct pattern as one moves from the 3-skill level to the CEM level. Officers also showed a distinct pattern of tasks performed as one moves from an entry-level position to a staff position. No major differences were found among MAJCOM groups or paygrade groups. And, the job satisfaction analysis for both enlisted and officer personnel showed that members are very content overall, but that guardsmen and reservists provided higher ratings than their active duty counterparts.

TABLE 75

COMPARISON OF JOB SATISFACTION INDICATORS FOR ACTIVE DUTY 15WX/A OFFICERS
(PERCENT MEMBERS RESPONDING)

	1-48 MONTHS TIUF (N=107)	49-96 MONTHS TIUF (N=97)	97+ MONTHS TIUF (N=250)
EXPRESSED JOB INTEREST:			
INTERESTING	79	86	88
SO-SO	13	8	8
DULL	8	5	4
PERCEIVED UTILIZATION OF TALENTS:			
FAIRLY WELL TO PERFECTLY	83	91	92
NOT AT ALL OR VERY LITTLE	17	9	8
PERCEIVED UTILIZATION OF TRAINING:			
FAIRLY WELL TO PERFECTLY	80	80	81
NOT AT ALL OR VERY LITTLE	20	20	19
SENSE OF ACCOMPLISHMENT GAINED FROM WORK:			
SATISFIED	70	77	81
NEUTRAL	4	6	4
DISSATISFIED	26	15	15

TABLE 76

COMPARISON OF JOB SATISFACTION INDICATORS FOR ACTIVE DUTY 15WX/A OFFICERS
(PERCENT MEMBERS RESPONDING)

	AFSC 15W1 (N=43)	AFSC 15W3 (N=205)	AFSC 15W4 (N=88)	AFSC 15W1A (N=17)	AFSC 15W3A (N=104)
EXPRESSED JOB INTEREST:					
INTERESTING	91	84	82	94	86
SO-SO	7	10	11	6	8
DULL	2	5	7	0	6
PERCEIVED UTILIZATION OF TALENTS:					
FAIRLY WELL TO PERFECTLY	91	89	91	94	87
NOT AT ALL OR VERY LITTLE	9	11	9	6	13
PERCEIVED UTILIZATION OF TRAINING:					
FAIRLY WELL TO PERFECTLY	88	80	80	65	81
NOT AT ALL OR VERY LITTLE	12	20	20	35	19
SENSE OF ACCOMPLISHMENT GAINED FROM WORK:					
SATISFIED	79	78	81	71	75
NEUTRAL	2	4	4	5	6
DISSATISFIED	19	18	15	24	19

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APPENDIX A

REPRESENTATIVE TASKS PERFORMED BY MEMBERS OF CAREER LADDER JOBS

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TABLE A1

WEATHER FORECASTER
(ST122)

TASKS		PERCENT MEMBERS PERFORMING (N=1,019)
E307	Decode weather forecasts	95
E300	Decode meteorological (METAR) observations	94
J540	Analyze Skew-T diagrams	93
J537	Analyze satellite data	92
J544	Analyze surface charts	92
J548	Analyze upper-air charts	91
F378	Conduct shift change briefings	91
E299	Decode forecast bulletins	91
J528	Analyze LAWCs	91
E301	Decode pilot reports (PIREPs)	90
I468	Amend weather forecasts	90
I480	Perform meteorological watches (METWATCHs)	89
I510	Prepare weather warnings	89
F404	Participate in meteorological discussions	88
E314	Encode weather forecasts	88
J550	Analyze vorticity charts	88
I519	Verify weather forecasts	88
F376	Cancel, extend, or amend local weather warnings	88
F388	Disseminate local weather warnings	88
F400	Disseminate weather forecasts	87
F375	Cancel, extend, or amend local weather advisories	87
F366	Brief aircrews	85
L595	Display satellite imageries	85
J546	Analyze thickness charts	85
I518	Verify weather advisories	85
E345	Prepare automatic response to query (ARQ) requests	85
I481	Perform synoptic scale forecasting techniques	84
M607	Acknowledge alerts on AWDS work stations	84
I507	Prepare weather advisories	84
E309	Display charts	83
E308	Decode weather messages	83
F387	Disseminate local weather advisories	83
I475	Extract information from climatological records	83
I479	Perform mesoscale forecasting techniques	82
E310	Display local weather information	81
M620	Display AWDS products	80
E332	Operate weather computer software programs	80
E337	Perform pilot-to-METRO service (PMSV) contacts	80
A23	Conduct briefings or presentations	78

TABLE A2

WEATHER OBSERVER
(ST143)

TASKS		PERCENT MEMBERS PERFORMING (N=538)
G422	Determine cloud types	99
G421	Determine ceiling	99
G430	Determine number and amount of coverage of cloud layers	98
G425	Determine precipitation types and intensities	98
G431	Encode surface observations	97
G427	Determine wind speeds, directions, and characteristics	97
G433	Estimate heights of cloud layers	97
G429	Determine existence, types, and amounts of obscurations	97
G424	Determine horizontal visibilities	96
G426	Determine vertical visibilities	96
G423	Determine dew points	95
G437	Measure precipitation	95
G435	Inform forecasters of weather conditions	94
G441	Perform barometer comparisons	92
E316	Encode weather observations	90
G440	Measure heights of cloud layers	90
G420	Determine barometric pressures and tendencies	90
G428	Determine existence, types, amounts, and trends of distant phenomenas	89
G407	Compute altimeter settings	87
G432	Estimate precipitation	86
F403	Disseminate weather observations	85
G417	Compute station pressures	85
G445	Read dry or wet bulb temperatures	85
E300	Decode meteorological (METAR) observations	84
G416	Compute sea level pressures	84
E355	Record or encode METAR codes	83
G414	Compute relative humidities	83
E293	Clean weather facilities	83
E364	Verify accuracy of clocks	80
E358	Replace paper, ribbons, or ink on weather equipment	80
F378	Conduct shift change briefings	78
G413	Compute pressure altitudes	78
E307	Decode weather forecasts	77
G434	Inform ATCs of weather conditions	76
M607	Acknowledge alerts on AWDS work stations	75
E337	Perform pilot-to-METRO service (PMSV) contacts	75
G412	Compute magnetic and true wind directions	73
E301	Decode pilot reports (PIREPs)	73
G436	Maintain visibility charts or photographs	70

TABLE A3

MANAGEMENT/SUPERVISORY
(ST032)

TASKS		PERCENT MEMBERS PERFORMING (N=404)
A23	Conduct briefings or presentations	85
A117	Participate in general meetings, such as staff meetings, briefings, conferences, or workshops, other than conducting	83
A27	Conduct general meetings, such as staff meetings, briefings, conferences, or workshops	72
A150	Write memoranda for records (MFRs)	72
A139	Write background papers, point papers, or talking papers	67
A21	Compile information for staff studies, staff summary sheets, or position papers	67
A24	Conduct cross-staff coordination	65
A43	Determine or establish work assignments or priorities	63
A138	Write award or decoration nomination packages	63
A38	Counsel subordinates concerning personal matters	62
A119	Plan briefings, conferences, or workshops	61
A137	Supervise military personnel	60
A32	Conduct supervisory performance feedback sessions	58
A7	Approve or disapprove correspondence, such as letters or messages	56
A80	Evaluate personnel for compliance with performance standards	55
A147	Write letters of appreciation	53
A144	Write EPRs	51
A58	Draft agendas for general meetings, such as staff meetings, briefings, conferences, or workshops	51
A154	Write trip reports	50
A40	Critique briefings or presentations	50
A105	Interpret policies, directives, or procedures for subordinates	49
A36	Coordinate weather and space environment support concepts, policies, or requirements with appropriate agencies	48
A81	Evaluate personnel for promotion, demotion, reclassification, or special awards	48
A75	Evaluate job or position descriptions	47
A84	Evaluate unit policies, OIs, or SOPs	46
C222	Annotate security forms for facilities or security containers	46
A2	Administer personnel or unit recognition or award programs	45
A51	Develop or establish work methods or procedures	44
A5	Allocate or designate use of equipment or supplies	44
A78	Evaluate manpower requirements	42
A67	Establish unit goals or objectives	42
A9	Approve or disapprove point, position, or talking papers	41
A68	Establish unit policies, operating instructions (OIs), or standard operating procedures (SOPs)	41
A14	Arrange logistics support for conferences or VIP visits	41

TABLE A4

GLOBAL WEATHER
(ST156)

TASKS		PERCENT MEMBERS PERFORMING (N=82)
J548	Analyze upper-air charts	84
J544	Analyze surface charts	83
J537	Analyze satellite data	80
E300	Decode meteorological (METAR) observations	79
J546	Analyze thickness charts	77
L595	Display satellite imageries	74
M620	Display AWDS products	73
E307	Decode weather forecasts	72
E293	Clean weather facilities	71
J540	Analyze Skew-T diagrams	70
J550	Analyze vorticity charts	68
F378	Conduct shift change briefings	68
E299	Decode forecast bulletins	68
F404	Participate in meteorological discussions	66
E345	Prepare automatic response to query (ARQ) requests	62
J552	Analyze wind charts	61
I514	Prog surface weather features	60
E332	Operate weather computer software programs	60
E308	Decode weather messages	60
E301	Decode pilot reports (PIREPs)	60
E320	File plotted charts or maps	60
E350	Prepare daily weather maps	59
E309	Display charts	59
I468	Amend weather forecasts	59
I480	Perform meteorological watches (METWATCHs)	56
A23	Conduct briefings or presentations	55
I515	Prog upper-air weather features	54
J542	Analyze stability indices	54
J545	Analyze temperature charts	54
I519	Verify weather forecasts	50
L597	Enhance satellite imageries	50
J528	Analyze LAWCs	50
F400	Disseminate weather forecasts	49
E314	Encode weather forecasts	49
I476	Extract information from weather plots	49
E305	Decode land synoptic observations	49
E326	Make entries in station logs	49
I479	Perform mesoscale forecasting techniques	48

TABLE 5

SATELLITE ANALYSIS
(ST070)

TASKS		PERCENT MEMBERS PERFORMING (N=35)
L595	Display satellite imageries	97
L597	Enhance satellite imageries	89
L599	Interpret satellite schedule products	86
J537	Analyze satellite data	77
L594	Create satellite loops	74
L598	Grid satellite imageries	71
L604	Perform quality control analyses of satellite imageries	69
E293	Clean weather facilities	57
B169	Conduct OJT	54
L591	Compute times of satellite pictures	51
L603	Maintain satellite imagery reference files	49
L590	Compute satellite picture coverages	46
E332	Operate weather computer software programs	46
L596	Distribute satellite pictures	43
C232	Destroy classified materials	43
L602	Maintain satellite data bases	43
E326	Make entries in station logs	43
E312	Download weather data from government bulletin boards	43
C222	Annotate security forms for facilities or security containers	43
L600	Label satellite pictures	40
E360	Report computer malfunctions	40
A137	Supervise military personnel	37
L593	Coordinate satellite pass schedules with affected agencies	37
J543	Analyze streamline charts	37
J544	Analyze surface charts	37
F378	Conduct shift change briefings	34
I481	Perform synoptic scale forecasting techniques	31
A43	Determine or establish work assignments or priorities	31
C263	Safeguard classified documents	29
I493	Prepare hurricane or typhoon position reports	26
G422	Determine cloud types	17

TABLE A6

COMPUTER PROGRAMMER
(ST174)

TASKS		PERCENT MEMBERS PERFORMING (N=22)
P735	Update computer software	95
P736	Write computer runstreams	95
P703	Develop computer software	86
P729	Perform computer software maintenance	86
P734	Test weather computer software	86
P737	Write computer software codes	82
P707	Evaluate effectiveness of weather computer software	82
P730	Prepare computer software documentation	77
P702	Determine flow sequences of computer software	64
P732	Submit computer runstreams	59
P697	Assemble weather computer software	59
P704	Develop data bases	55
P721	Load selected files from tapes to disks	50
P718	Input simulated weather data	45
P715	Initiate software recovery procedures	45
A117	Participate in general meetings, such as staff meetings, briefings, conferences, or workshops, other than conducting	45
P705	Develop simulated weather conditions for computer software	41
P725	Manage software projects	41
P710	Extract and reformat computerized weather data	41
P714	Initiate software problem reports	41
P716	Initiate corrective procedures for data errors	36
P709	Extract station identification data from master station catalogs	36
P731	Specify weather input-output formats	36
P733	Test weather computer hardware	32
P719	Inventory computer software	32
E332	Operate weather computer software programs	27
J555	Verify NWPs	27
P713	Initiate magnetic tape shipments	18
C225	Compile data for records, reports, logs, or trend analyses	18

TABLE A7

CONTINGENCY/MOBILITY
(ST161)

TASKS		PERCENT MEMBERS PERFORMING (N=22)
A23	Conduct briefings or presentations	95
A124	Plan deployments of equipment or personnel	91
T902	Conduct mobility training	86
A117	Participate in general meetings, such as staff meetings, briefings, conferences, or workshops, other than conducting	86
T943	Operate TACMET equipment	86
T948	Perform camouflage procedures	86
T947	Participate in exercise or mobility deployment planning meetings	82
A137	Supervise military personnel	82
A43	Determine or establish work assignments or priorities	82
T939	Obtain light data using PCs	82
A150	Write memoranda for records (MFRs)	82
T945	Pack contingency equipment	82
A144	Write EPRs	82
A138	Write award or decoration nomination packages	82
T967	Set up TACMET equipment	82
A32	Conduct supervisory performance feedback sessions	82
T950	Perform field hygiene and safety activities	82
T951	Perform self-aid and buddy care techniques	82
T940	Operate Manual Observing Systems (MOSs)	82
T913	Determine equipment requirements for mobility exercises or deployments	77
T935	Log on computer weather networks using personal computers (PCs)	77
T901	Conduct mobility exercise or deployment site surveys	77
B208	Plan or schedule training	77
T966	Set up TACCOM equipment	77
T924	Don or doff chemical warfare personal field gear	77
A49	Develop inputs to mobility, contingency, disaster preparedness, or unit emergency or alert plans	73
A80	Evaluate personnel for compliance with performance standards	73
E312	Download weather data from government bulletin boards	73
T934	Inspect tactical meteorological (TACMET) equipment	73
T933	Inspect tactical communications (TACCOM) equipment	73
A2	Administer personnel or unit recognition or award programs	73
T942	Operate TACCOM equipment	73
T891	Adjust azimuth and elevation angles on satellite dishes	73
T914	Determine personnel requirements for mobility exercises or deployments	68
T918	Develop mobility exercise or deployment checklists	68
T962	Schedule personnel for mobility training, exercises, or deployments	68
T921	Develop tactical SOPs	68

TABLE A8

SPACE ENVIRONMENTAL SUPPORT
(ST028)

TASKS		PERCENT MEMBERS PERFORMING (N=20)
Q744	Operate Space Environment Laboratories Data Acquisition Display Systems (SELDADSs)	95
Q773	Prepare and transmit 3-hour Ap summaries	90
Q776	Prepare and transmit 7-day Ap forecast bulletins	90
Q782	Prepare and transmit daily space environment summaries	90
Q786	Prepare and transmit geomagnetic event in-progress reports	90
Q787	Prepare and transmit geomagnetic event forecast/warning reports	85
Q775	Prepare and transmit 45-day Ap/F10 forecast bulletins	85
Q768	Perform Shock Time of Arrival (STOA) model input and analysis procedures	85
Q759	Perform Proton Prediction System (PPS) model input and analysis procedures	85
Q788	Prepare and transmit HF useable frequency bulletins	80
Q800	Prepare and transmit primary HF radio propagation reports	80
Q810	Prepare and transmit daily magnetometer analyses	80
Q772	Prepare and transmit 1-day Ap summaries	80
Q777	Prepare and transmit 7-day Ap/F10 forecasts	80
Q740	Maintain solar or geomagnetic recurrence logs	80
Q739	Maintain solar or geomagnetic events logs	80
Q743	Operate HMUS backup systems	80
Q752	Perform Ionospheric Communications Analysis and Prediction (IONCAP) model input and analysis procedures	75
Q771	Perform post analysis of space environment events	75
Q791	Prepare and transmit Ionospheric Communications Enhanced Profile Analysis Circuit (ICEPAC) model outputs	75
Q811	Prepare and transmit daily space messages	75
Q804	Prepare and transmit short-wave fade advisories	75
Q802	Prepare and transmit satellite X-ray event reports	75
Q797	Prepare and transmit magnetometer analyses	70
Q741	Monitor astrogeophysical data bases	70
Q784	Prepare and transmit energetic particle event forecast/warning reports	70
Q785	Prepare and transmit extended period reports	65

TABLE A9

SOLAR ANALYST

TASKS		PERCENT MEMBERS PERFORMING (N=18)
R860	Prepare and transmit optical and radio status messages	100
R856	Prepare and transmit event-level solar activities	100
R839	Operate optical telescopes	94
R817	Analyze Digital Image Processing Systems (DIPSs)	94
R822	Annotate solar analysis data collection forms	94
R821	Analyze or report white light activities	94
R865	Transmit daily equipment summaries	94
R851	Perform solar archival activities	94
R845	Perform flare patrols in semiautomatic mode	94
R846	Perform image rotator checks	94
R844	Perform flare patrols in automatic mode	89
R835	Encode solar observation data, other than sunspot regions	89
R836	Encode sunspot regions	89
R832	Decode solar observation data	89
R843	Perform calibration checks (CALCHECKs)	89
R866	Transmit solar optical reports	89
R853	Perform telescope operations emergency shutdown procedures	89
R823	Assign new solar (SN) region numbers	83
R854	Plot sunspot regions	83
A29	Conduct self-inspections or self-assessments	83
R829	Calibrate optical telescopes	78
R852	Perform solar magnetic analyses	78
R831	Calibrate spectrographs	78
R841	Perform burst patrols in automatic mode	72
R820	Analyze sweep frequency interferometer radiometer (SFIR)	72
R847	Perform Integrated Solar Radio Flux (IFLUX) procedures	72
R819	Analyze Radio Solar Telescope Network (RSTN) radio frequency interference (RFI)	72
R867	Transmit solar radio reports	72
R864	Stow solar radio antennas	72
Q738	Analyze or report H-alpha activities	67
R840	Operate solar radio antennas	67
R862	Record and transmit data from SFIR	67
R858	Prepare and transmit IFLUX bulletins	67
R830	Calibrate SFIR	67
R871	Verify sunspot region encoding	67
R863	Set up solar optical acquisition tables	67
R828	Calibrate fixed frequency radiometers	61
R818	Analyze radio burst spectrum data	61
R838	Interpret and record data from fixed frequency radiometers	56

TABLE A10

AERIAL RECONNAISSANCE

	TASKS	PERCENT MEMBERS PERFORMING (N=15)
O686	Perform flight crew checklist tasks	100
O678	Encode horizontal observation data	100
O676	Disseminate weather reconnaissance data	100
O672	Conduct tropical cyclone mission procedures	100
O680	Encode tropical cyclone vortex data	100
O690	Perform meteorological systems calibration procedures	100
O669	Archive weather reconnaissance mission meteorological data	100
O681	Evaluate aircraft platform data for dropsonde release	100
O692	Perform preflight inspections of weather reconnaissance aircraft	100
O679	Encode tropical cyclone supplementary vortex data	100
O691	Perform postflight procedures	100
O689	Perform in-flight inspections on reconnaissance aircraft weather equipment	100
O673	Conduct tropical disturbance investigative mission procedures	100
O688	Perform Improved Weather Reconnaissance System (IWRS) degraded operations tasks	100
O674	Conduct winter storm reconnaissance mission procedures	100
O694	Perform weather reconnaissance flight and mission planning activities	93
O675	Coordinate specific weather reconnaissance mission requirements with customer	93
O682	Evaluate dropsonde data on weather reconnaissance aircraft	93
O671	Conduct tasked special operations and research mission procedures	93
O693	Perform emergency equipment procedures on weather reconnaissance aircraft	93
O683	Evaluate reconnaissance aircraft generated meteorological data	87
G430	Determine number and amount of coverage of cloud layers	80
G433	Estimate heights of cloud layers	80
E297	Conduct public tours of weather facilities	80
O685	Perform antihijacking procedures	80
O670	Brief passengers aboard weather reconnaissance aircraft	73
G422	Determine cloud types	73
E353	Record reconnaissance observations (RECCOs)	67
G427	Determine wind speeds, directions, and characteristics	67
J548	Analyze upper-air charts	67
F393	Disseminate RECCOs	60
E332	Operate weather computer software programs	60
E303	Decode rawindsonde reports	60
E300	Decode meteorological (METAR) observations	60
J544	Analyze surface charts	53
B176	Demonstrate use of equipment or tools	53
E316	Encode weather observations	47
H466	Plot weather RECCOs	47
G423	Determine dew points	47

TABLE A11

TRAINING
(ST284)

TASKS		PERCENT MEMBERS PERFORMING (N=15)
B168	Conduct formal classroom training	100
B161	Administer or score tests	100
B216	Write lesson plans	93
B217	Write test questions	93
B173	Counsel trainees on training progress	87
B174	Critique tests	87
B198	Evaluate progress of trainees	80
A23	Conduct briefings or presentations	73
B170	Conduct skill performance tests	67
B184	Develop formal course curricula, plans of instruction (POIs), or specialty training standards (STSs)	67
B212	Recommend course curricula revisions	67
B205	Maintain training records or files	60
B171	Conduct training conferences or briefings	60
B192	Evaluate student critiques	60
A148	Write letters of counseling	53
B176	Demonstrate use of equipment or tools	53
A40	Critique briefings or presentations	53
B179	Develop formal training programs, plans, or procedures	53
B167	Complete student entry or withdrawal forms	53
A150	Write memoranda for records (MFRs)	53
B204	Inspect training materials or aids for operation or suitability	47
B193	Evaluate training methods or techniques	47
A117	Participate in general meetings, such as staff meetings, briefings, conferences, or workshops, other than conducting	47
B183	Develop skill performance tests	47
A38	Counsel subordinates concerning personal matters	40
B178	Develop course control documents	40
B211	Procure training aids, space, or equipment	40
A80	Evaluate personnel for compliance with performance standards	33
B215	Write course syllabuses	33

TABLE A12

AWDS
(ST654)

TASKS		PERCENT MEMBERS PERFORMING (N=13)
M646	Troubleshoot AWDS deficiencies or outages	100
M642	Report and track AWDS deficiencies or outages	100
M636	Perform AWDS restart procedures	100
M631	Monitor line statuses of AWDS	100
M638	Perform AWDS startup or shutdown procedures for Graphics Work Stations	100
M632	Monitor receipt of AWDS weather data	100
M619	Delete AWDS products	100
M639	Perform AWDS startup or shutdown procedures for Meteorological Processor (MP) or Communications Management (CM) Systems	100
M620	Display AWDS products	100
M625	Generate AWDS horizontal products	100
M633	Perform AWDS command sequences	100
M607	Acknowledge alerts on AWDS work stations	100
M626	Generate AWDS vertical products	100
M648	Update AWDS products	100
M622	Edit AWDS command sequences	100
M644	Store locally created or modified AWDS products	100
M610	Create AWDS command sequences	100
M643	Route AWDS products	100
M609	Create AWDS checkpoint tapes	100
M617	Create or modify AWDS plot models	100
M630	Maintain AWDS system tables	92
M614	Create and display AWDS product loop sequences	92
M647	Update AWDS product loop sequences	92
M623	Edit AWDS products	92
M618	Decode product identifiers (PIDs)	92
M637	Perform AWDS software testings	85
M629	Maintain AWDS data requirements	85
M640	Prepare AWDS contractor logistics support (CLS) reports	77
M616	Create or maintain continuity logs	69